MARCH 4, 1974

Commerce Today

Tripling Domestic Waterborne Commerce

Page 4

FROM THE
SECRETARY

'The Real Price' Of Energy

In his Wealth of Nations, Adam Smith wrote: "The real price of everything is the toil and trouble of acquiring it." It should be clear by now that a great deal of toil and trouble, involving great expense, will have to be put forth to acquire secure energy supplies to maintain the American economy in the years ahead. Energy development must be high on our list of national priorities, but adequate energy development will remain in great doubt unless we are willing to pay "the real price" of this very large undertaking.

"Operation Independence," the task of implementing the policies that will encourage restoration of energy self-sufficiency, involves one of the most important commitments facing the American people. On fulfilling that commitment rests our aspirations for continued economic growth, with expanding employment opportunities and job security. By solving our energy problems we can make progress in coming to terms with the problem of inflation at home, and prevent weakening of the dollar abroad, caused by inflated payments for foreign energy that could exceed $30 billion a year by 1980.

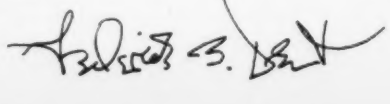
The alternative to developing our domestic energy resources is to continue to drift toward irreversible dependence for essential fuels on foreign sources that are now proven unreliable. America cannot be a first rate power with a second rate energy supply. We cannot achieve a first rate energy supply except by policies which will encourage the private sector to commit hundreds of billions of dollars to energy research, exploration and development in the next decade.

Of all the wrong approaches to energy policy, none has been more illusory or counter-productive than the Federal Government's 20-year attempt to set a "just and reasonable" price for natural gas at the well. This misadventure by government produced the shortages of natural gas which were the first omen and the leading edge of the far worse energy shortages existing today. Despite this experience, there are some who would now compound the folly by "rolling back" and rigidly controlling the price of crude oil as well as natural gas.

The advocates of such price controls are violating economic logic when they seek to convince energy users that we can solve our energy supply problems while arbitrarily controlling the prices of all fuels. This is economic nonsense. It advocates reliance on the bankrupt idea that government can devise a low price that will elicit adequate supply, and thus guarantee all energy users the best of all possible worlds. This is the same false premise that—as all previous experience has shown—can lead to but one end: shortages, black markets, and, in the end, even higher prices.

It need not be that way. All knowledgeable assessments indicate that the United States possesses total undeveloped energy resources, conventional and otherwise, adequate to reachieve self-sufficiency—if we have the will. In addition to an adequate resource base, we have no technological limitations. American ingenuity in energy exploration and development has been envied and exported worldwide. It is widely recognized that our first American energy shortage, that of natural gas, was brought about because of the notion that we could somehow have bargain basement energy prices, irrespective of the cost required to produce increasing supplies.

An adequate energy supply at the lowest competitive price is far preferable to chronic shortages at any price that may be set by the government. Unless we are ready to accept that truth, and to pay—as Adam Smith admonished—"the real price of acquiring" the tremendous energy supplies required in the future, we are not yet ready to take the first step in Project Independence in solving the energy crisis.



U.S. DEPARTMENT
OF COMMERCE

FREDERICK B. DENT
Secretary

JOHN K. TABOR
Under Secretary

BASIL R. LITTIN
Special Assistant to the Secretary for Public Affairs

THOMAS A. BELL
Director of Communications

RICHARD BALENTINE
Editor

CLARENCE M. ZENS
Associate Editor, International Commerce

ARTHUR McDERMOTT
Associate Editor, Domestic Business

AMERICO A. W. FAVALE
Graphics Coordinator

Staff Writers: *Douglas F. Carroll, Felix Cotten, Margaret L. Hanson, Wynola Robison.*

Published biweekly by the U.S. Department of Commerce, Washington, D.C.
Annual subscription rate $29.80 ($7.45 additional for foreign mailing, $5.75 additional for domestic air mailing). Single copy $1.15. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce Field Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.
Microfiche copy available at 95 cents per issue from National Technical Information Service, Springfield, Virginia, 22151.
Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C., 20230.

Contents of this publication are not copyrighted unless indicated, and if not so indicated, the articles may be reproduced in part or in full without any prior consent. The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 31, 1976.

Commerce Today

Vol. IV, No. 11, March 4, 1974

2 Economic Highlights
Budget passes $300 billion mark; national defense budget rises but it accounts for only 29 percent of total compared to 44 percent in 1969.

4 U.S. Domestic Shipping Cargoes Should Triple By 2000 A.D.
Maritime Administration study projects domestic waterborne commerce will triple in less than 30 years. The industry's future is seen closely tied to the pattern of energy development.

7 Industrial Panel Takes Lead In Energy Conservation Drive
National Industrial Energy Conservation Council has shifted into working gear by adopting objectives recommended by its various subcouncils during a second meeting in Washington.

8 Federal Research Data On Instant Call For U.S. Business Projects
At the touch of a government computer, American businessmen have a rich repository of information on almost every aspect of human activity available to them in something called NTISearch.

9 Domestic Business Report
National Minority Purchasing Council records $215 million in purchases in 1973—Industry Highlights-Fertilizer shortfall likely despite rising production—Ferrous scrap released from price controls, export actions set in attempt to relieve market disruption—Each tourist dollar producing more than seven cents in tax revenue.

15 International Commerce Report
Trade Missions report from Far East and Brazil—Two U.S. exhibitions held in Spain—Economic trends in Japan, Norway, New Zealand, several African nations—New international business reports—Calendar for traders—Commerce overseas trade promotion schedule—Investment, trade opportunities.

COVER: *Trailership* Ponce de Leon *ferries cargo off San Juan, Puerto Rico, which it services from the U.S. mainland. Operated by Transamerica Trailer Transport Inc., this ship is part of the growing domestic waterborne commerce reported in the story beginning on Page 4 which a new study predicts will triple business by the year 2000.*

Subscription Price Cut!

With this issue,* Commerce Today *introduces its "new look."

Using space-saving, easy-to-read type and changes in format designed to enhance the magazine's appearance, we've slimmed down considerably. But in the trimming process editorial content is virtually unchanged—all we've lost is a little weight . . . deliberately.

We've done this to bring you the same fact-filled magazine at a substantial savings in cost. Subscriptions to* Commerce Today, *which had been increased to $42.40 January 1, will actually cost much less. Under a price rollback just announced by the Government Printing Office, annual subscriptions are now available for $29.80. (See masthead this page for foreign and airmail information.)

We hope this will induce more to order* Commerce Today *for information and developments in the area of economics, domestic and international business, science and technology and more.

If you subscribed or renewed your subscription after November 15, 1973, please send the address label from your copy of the magazine with this notice to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 for appropriate refund. — The Editor

ECONOMIC
HIGHLIGHTS

Dominant Trends In Federal Expenditures: Gains In Revenue-Sharing, Social Security

Economic Highlights is prepared by Dr. Sidney L. Jones, Assistant Secretary of Commerce for Economic Affairs.

Another federal spending milestone has been reached in the announcement of the proposed fiscal year 1975 budget. Outlays are expected to be $304.4 billion. In fiscal year 1962 the budget broke through the $100 billion level. In fiscal year 1971 it topped $200 billion. Given the rapid growth of program obligations and persisting inflationary pressures, the $400 billion level will soon be reached. Approximately three-fourths of each new budget is already committed to existing spending obligations so it is obvious that federal expenditures will continue to rise irrespective of specific fiscal policies adopted in the future.

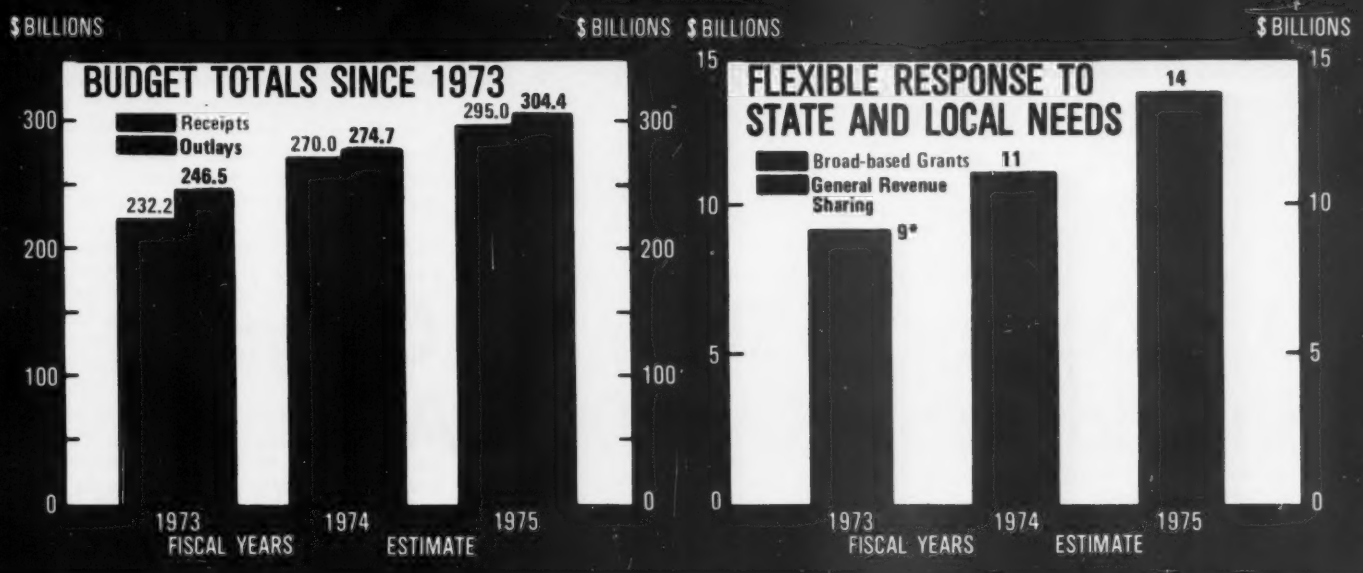
Although the overwhelming impressions of size and growth dominate federal budget analysis there are many changing patterns within the large totals. One of the most significant shifts involves outlays for national defense which are expected to rise from $79.5 billion this year to $85.8 billion in fiscal year 1975. Since current dollar outlays for defense have remained virtually constant since 1968, inflationary pressures in recent years have sharply reduced the "real" purchasing power of defense spending. In addition, pay raises have increased the human share of the defense budget even though the number of military personnel has dropped from 3½ million to 2.2 million. While striving for maximum efficiency and cost-effectiveness in military preparedness there should be greater recognition of the cost for national security.

The stability of defense spending since 1968 has significantly reduced its share of the total federal budget. In fiscal year 1955 defense spending represented 60 percent of the total. By fiscal year 1969 the figure had declined to 44 percent. Despite the increased size of the defense budget next year, its share of the total will be 29 percent. At the same time, federal spending for human resources has risen steadily and is expected to comprise 50 percent of the total budget in fiscal year 1975. These changing priorities are summarized in the third chart.

A major factor in the budget shift toward human resources has been the rapid rise of income security outlays. Since 1969 income security payments have increased 165 percent and are expected to reach $100 billion next year. Social security payments to replace income lost through retirement, disability, unemployment or death represents the major part of this surge. By 1975, there will have been five social security benefit increases since 1969 totaling almost 70 percent. Social security benefits are now programmed to increase automatically to compensate recipients for the eroding effects of inflation. Other income security expenditures for public assistance and services and various retirement and social insurance are also increasing each year. Various human resources expenditures for health, education and science, manpower programs, veterans benefits, crime prevention, civil rights activities and a vast group of social services have also continued to expand rapidly.

In addition to the rising levels of spending, the delivery system for federal funds has also been changing. The fiscal year 1974 budget continues the trend away from direct federal purchases of goods and services and toward benefit payments to individuals and grants to state and local governments.

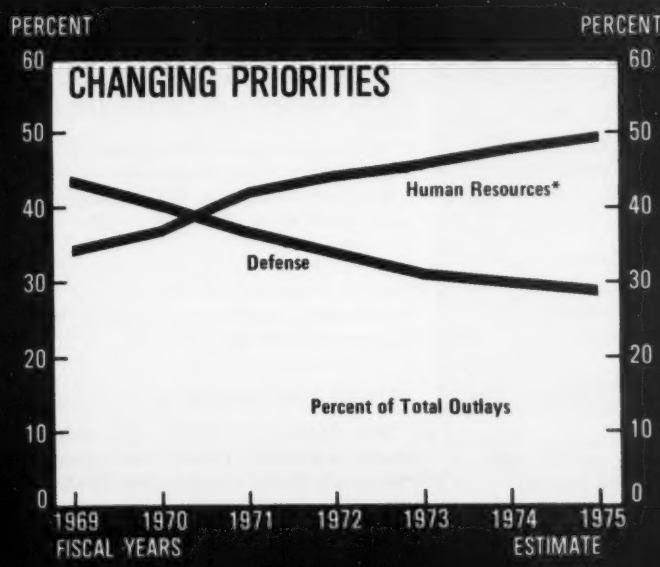
In 1975 federal grants to state and local governments are expected to total $51.7 billion. Two approaches are used to accomplish this reorientation. First, General Revenue

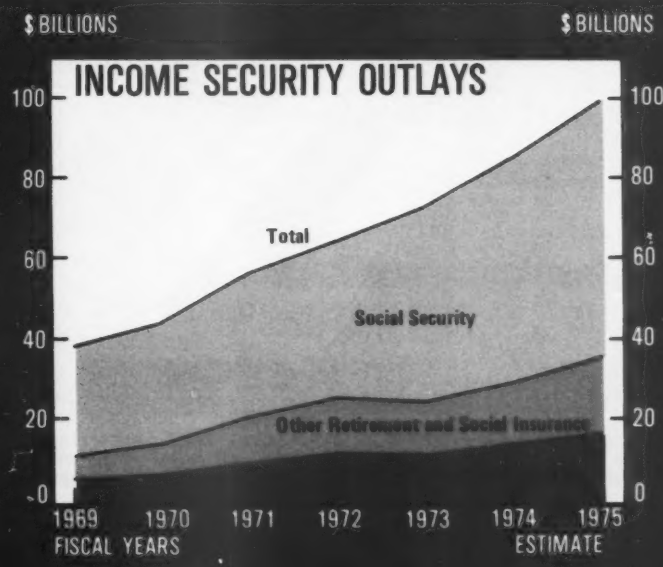


Sharing is used to funnel approximately $6 billion to state and local governments. This approach emphasizes local discretion in spending, minimal restrictions and predictable levels of appropriations so that authorities can plan programs into the future. Second, emphasis has shifted to substituting broad-based grants for the categorical grant programs of the past. Categorical grants typically require federal review and approval on a project-by-project basis. The broad-based grants maximize local authority but retain some federal control in distributing federal funds.

The concepts of revenue-sharing and broad-based grants are now functioning in the areas of law enforcement, manpower programs, and rural economic development, and efforts are progressing to expand these approaches in health, education, transportation, and community and economic development.

The federal budget is obviously a major variable in our economy because of the size of the expenditures and the direct impact on the allocation of the nation's resources. Government spending is often the motivating factor which stimulates private sector research and development activity. Our taxation and spending policies also directly influence the balance between immediate consumption and investment for future consumption. The future of our society is heavily influenced by current federal budget decisions. The fundamental importance of the federal budget requires all citizens to become more informed and concerned about existing budget trends. Our economy and society's future will be directly influenced by current fiscal decisions.





Commerce Today

Vol. IV, No. 11
March 4, 1974

U.S. Domestic Shipping Cargoes Should Triple By 2000 A.D.

Domestic waterborne commerce of the United States is projected to triple by the year 2000, according to a study just released by the Maritime Administration.

The domestic marine industry's future is closely tied to the pattern of energy development in this nation and throughout the world, the study shows.

The study, which was carried out for the Commerce Department agency by the management consultant firm of A. T. Kearney, Inc., of Chicago, reflects a detailed examination of current traffic flow patterns of each of the domestic marine transportation segments—inland waterways, Great Lakes and domestic ocean carriers—and an assessment of the economic and competitive forces that are expected to influence their operations during the remainder of the century.

Tonnage handled by the three domestic marine transportation segments, which aggregated 867 million tons in 1970, is expected to rise to 2.7 billion tons by the year 2000. Currently, the water carriers account for 17.6 percent of domestic tonnage movement, 26.9 percent of the total freight ton-miles, but only 2.3 percent of the freight revenues.

POOSH 'EM UP—*Despite all appearances, this 7,500-horsepower boat is towing 36 barges on the Mississippi. Pushing or towing, it's certainly earning its money. Inland waterways carry the largest volume of domestic marine commerce and are expected to grow.*

Tonnage handled annually by the inland waterways segment is expected to more than double, reaching 869 million tons in the year 2000. The Great Lakes marine tonnage also is forecast to double, reaching 325 million tons. The domestic ocean segment, encompassing coastal and intercoastal movements as well as the noncontiguous trade (Puerto Rico, Hawaii and Alaska), is projected to show a 326 percent increase to 1.5 billion tons.

Fossil fuels dominate

It is predicted that by the year 2000 fossil fuels will account for 1.7 billion of the 2.7 billion tons handled by the marine mode, with crude and refined petroleum accounting for 1.4 billion tons of this.

However, by the beginning of the next century most of the world's petroleum supplies could be close to exhaustion. With substitution of nuclear, solar and other power sources well-established by then, the major market of the domestic water carriers is expected to decline as the alternative energy sources gain predominance.

The study identified several areas on which government and industry officials can concentrate to ameliorate the projected decline:

- Promote more widespread use of improved cargo handling technology.
- Concentrate development efforts on relieving constraints on the high-density segments.
- Actively pursue development of coastwise roll-on, roll-off (trailership) services.
- Assure utilization of the now-available research to more effectively market marine services.
- Point out the marine mode's indirect benefits to society through lessened energy consumption and reduced air pollution and highway congestion.

Inland waterways

The Mississippi River and Gulf-Intracoastal waterways systems are major arteries in a network of more than 25,000 miles

of navigable waterways that comprise the inland waterways system. The inland segment's 40-fold man hour productivity increase over the past four decades makes it an efficient mode for transporting bulk commodities and semi-finished goods, the study shows. Its trade area accounted for more than half the domestic marine market in 1969.

Tonnage forecasts in the study reflect relatively modest growth patterns for flows of coal, fuel and crude oil. However, important gains are expected for marine transportation of chemicals, cash grains, mining products and primary iron and steel.

Rapid technological development has led to the productivity increase among inland marine carriers. The output of a typical barge tow has leaped from 150,000 to more than three million ton-miles per day while advances in propulsion, navigation, and control cut crew size in half.

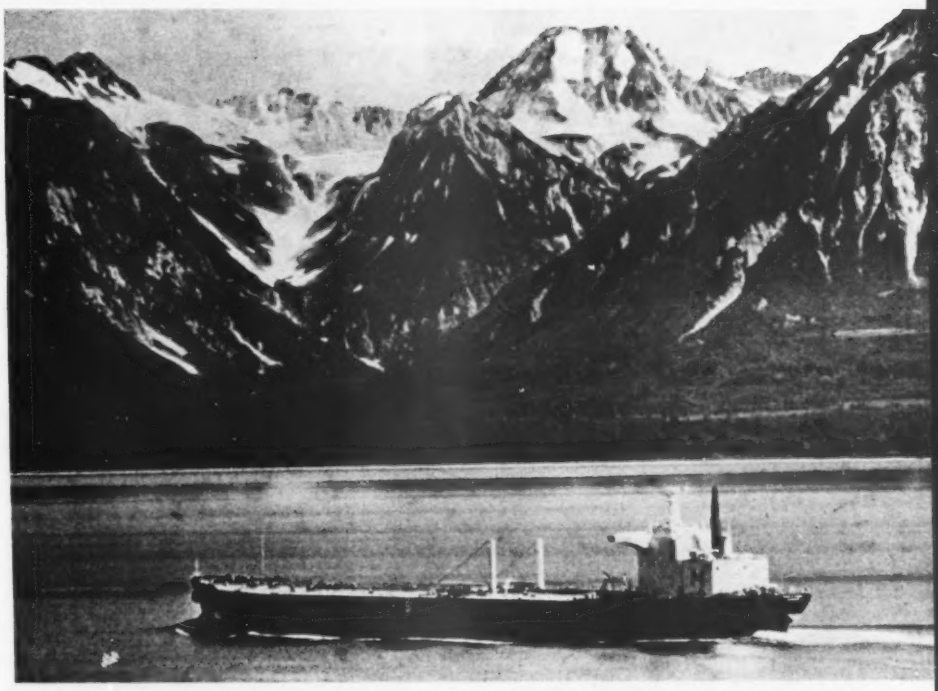
"These tremendous strides in productivity have been facilitated by an industry of responsive management and cooperative labor," the study notes.

Cargo handling was found in the study to be far behind the level of available technology. The study says that today it is not unusual to find cargo handling costs often exceeding the line-haul portion of transportation by barge.

Capacity constraints on the inland waterways could hamstring growth. The study anticipates that unless the waterway system's capacity is expanded it will be unable to reach its projected growth potential.

Plans are in progress for relieving some of the current bottlenecks on the Mississippi, Ohio and Illinois rivers. However, it can be anticipated that as the number of tows doubles, new areas of congestion will develop.

Capacity could be expanded through improving locks, removing obstructions such as bridges with narrow pier spans and vertical clearances, and dredging 12 foot channels in key segments of the system. Providing 12-foot channels could boost capacity by 40 to 50 percent. Locking improvements and obstruction removal would help ensure that the inland waterways within the trade area will be able to absorb the more than 860 million tons projected for it by the year 2000.



FRINGE BENEFIT—*Sailors on this tanker plying the Alaskan Coast don't get bored with the scenery. There is enormous growth potential for domestic traders operating in such areas which are not contiguous with the Continental United States.*

The domestic ocean trade area is expected to experience the greatest increase in traffic among the three areas of domestic waterborne commerce. It is expected to more than quadruple present tonnage by the turn of the century.

Petroleum and chemical bulk commodity movements dominate the contiguous domestic ocean carriers' traffic. Fuel and crude oil tonnage is expected to increase to more than 1.2 billion tons, or 80 percent of total marine tons.

The study's growth projections are based on development of deepwater ports off the Atlantic Coast. If an East Coast deepwater port facility is not built, a number of alternative petroleum flow patterns could emerge.

Two non-bulk market opportunities for contiguous domestic ocean carriers were identified in the study. They are container feeder service and coastwise roll-on, roll-off (trailership) service.

The container revolution was ushered in by Sea-Land in the Puerto Rican trade in 1956, and the roll-on, roll-off concept first flourished in Puerto Rico with Trans-American Trailer Transport's entry in 1968. However, the study indicates that this cush-

Projected Growth In Domestic Marine Tonnage, 1969-2000

Commodity	Thousands of Tons 1969	2000	Percent Increase
Fuels and lubricants	261,183	1,157,502	307
Mining products	141,632	334,272	135
Coal	158,180	293,070	85
Crude oil and natural gas	109,863	223,039	103
Chemicals	30,882	196,856	537
Iron ore	73,053	160,099	119
Durable manufactures	40,412	144,234	257
Cash grains	24,261	72,461	198
Agricultural products	24,216	45,663	86
Primary iron and steel	8,213	25,145	206
Paper	3,687	13,566	268
Raw and refined sugar	3,228	9,678	199
Lumber	2,451	8,225	235
Non-durable manufactures	3,244	7,132	120
Grain mill products	2,548	5,037	97
Canned fruits and vegetables	1,247	4,084	226
Fabricated metal products	1,663	3,382	103
Metal ores	2,023	3,318	64
Nonferrous primary metals	611	2,205	261
Total	892,597	2,708,968	203

CLOSE QUARTERS—*Two bulk carriers pass each other at a Great Lakes crossroad. Domestic waterborne commerce is dominated by coal, iron ore and heavy bulk commodities.*

ion may have been eroded and future rate relief may be necessary to maintain the service level on which the Puerto Rican economy depends.

Hawaiian waterborne commerce principally is consumption-oriented, with some back-haul of agricultural commodities. Future trade is expected to involve Alaskan oil shipments. North Slope development will determine the future direction and growth of trade to and from Alaska.

Five lakes and an accessway to the Atlantic via the St. Lawrence Seaway are included in the Great Lakes' transportation artery which stretches 2,342 miles.

Traffic on lakes

Of the Great Lakes' total transportation market tonnage, the marine mode carried more than 72 percent in 1969. This is the largest percentage of penetration among the three trade areas, but the smallest in terms of volume. Great Lakes waterborne commerce is expected to grow at the slowest rate because of some natural disadvantage as a transportation artery. Winter freeze-overs to which technology might be applied, and small channels which restrict vessel size for transit from the ocean are among the problems of nature confronting Great Lakes shippers.

Waterborne traffic growth also depends on future steel industry plant expansion in the area. Most of the Great Lakes tonnage is iron ore, limestone and coal for the steel industry, and some coal shipments for power generation.

Development of Western U.S. coal deposits would offer an opportunity for market expansion through movement of Western coal via Duluth-Superior to Great Lakes users.

The coal traffic would involve an intermodal movement with unit trains carrying the coal from the coal fields to a transloading point, then by lake bulker to the steel mill or power plant. It might include additional unit train haul at the destination end to move the coal inland.

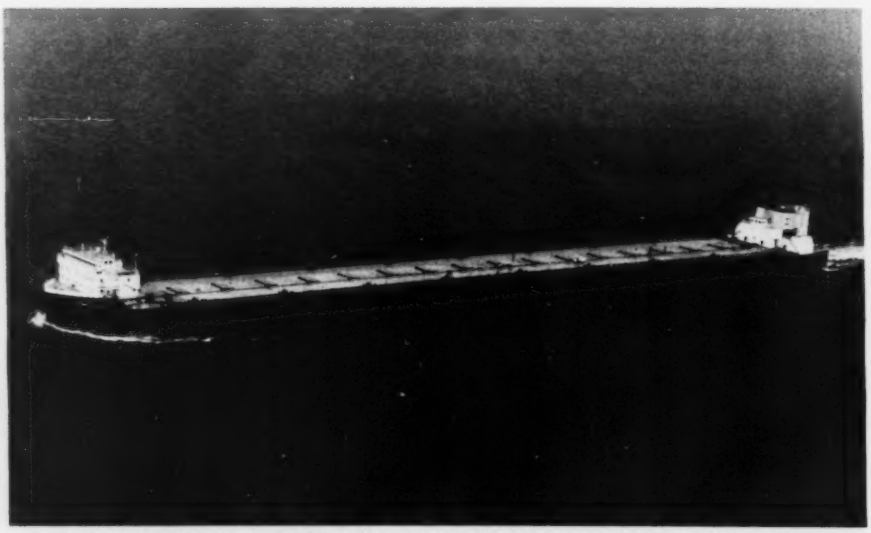
This movement—now beginning—offers significant future opportunity, the study says. To most effectively capitalize on this opportunity, it will be necessary to provide extremely efficient intermodal transfer facilities and, perhaps, to construct new and efficient self-unloading bulk carriers for the Lakes.

Railcar ferries, the only domestic general cargo now handled by the Great Lakes marine industry, is an area for expansion.

At least one rail operator is considering expansion of the service by construction of new, larger, faster, more efficient ferries incorporating existing levels of modern marine technology.

The direction of the nation's energy policy will play a major role in patterns and rates of growth of domestic waterborne commerce, the report concludes. Delay in completing the Alaska pipeline, the speed with which Western coal deposits are developed or energy self-sufficiency from land-locked sources would dramatically alter projected marine flows.

Detailed trade area reports for each of the three domestic shipping segments—Inland Waterways, Great Lakes and Domestic Ocean—and other back-up data, will be available for purchase from the National Technical Information Service, Springfield, Va. 22151.



'. . . **AND NEVER THE TWAIN'**—*It's a long trip from stem to stern of the* Stewart J. Cort, *an ore carrier which operates in the Great Lakes area. The Great Lakes are one of the three major areas of U.S. domestic waterborne commerce.*

Industrial Panel Takes Lead In Energy Conservation Drive

A Rochester, N.Y., firm increased its fourth quarter sales and employment while using 32 percent less electric power and 43 percent less natural gas than in the same '72 period.

A New England manufacturer reduced its electrical consumption 17 percent and adopted a ten-point program which resulted in nearly 35 percent savings on fuel oil.

A major diversified manufacturing firm realized an 8 percent energy savings per unit output in 1973 when compared to 1972.

Examples of American industry's lead role in energy conservation were cited by Secretary Dent at the second meeting of the National Industrial Energy Conservation Council.

Expressing "pride in the private sector's" response, Secretary Dent told the representatives of the private sector "I expect the advice which I receive from this Council to have a major impact on the formation of government policies on energy conservation."

The meeting dramatized the impact of government and industry dialogue on energy issues as the Commerce Secretary, Under Secretary John K. Tabor and three Assistant Secretaries of Commerce responded to questions and suggestions from Council members.

The Council, formed in December, shifted into working gear by adopting objectives recommended by subcouncils on technology, product efficiency, motivation and public awareness.

The product efficiency subcouncil will develop techniques by which consumers can use, and care for, existing products with maximum efficiency.

"It will take five to eight years before new products represent 50 percent of units in operation," noted Reginald Jones, president of General Electric Co. "If we are really serious about energy conservation we should concentrate on consumer education on use of the products they have."

While emphasizing public information in relation to products now in existence, Jones, chairman of the product efficiency subcouncil, said, industries should not neglect product improvement.

The product efficiency subcouncil will also develop a rationale for mandatory energy labeling of new products and will identify new or redesigned products that can produce significant energy savings in years ahead.

The technology subcouncil, chaired by C. B. Branch, president of Dow Chemical Co., is working with individual industries to determine the kinds and quantities of energy used, and present technically feasible methods of converting to heavier fuel.

The panel is also attempting to determine efficient means to recover, and sell or recycle all waste materials.

In an attempt to develop a permanent and useful program for all industries the technology subcouncil produced a do-it-yourself kit, "How to Profit by Conserving Energy," which provides a format, with an example, for calculating the energy content of a product. As the kit demonstrates, such calculations can highlight those steps in the production process which have the greatest potential for energy savings. With the aid of the kit, one can set meaningful energy conservation goals and maintain a quantitative record of progress toward those goals.

Copies of the kit are available from Dr. Bruce B. Robinson, Room 3870, U.S. Department of Commerce, Washington, D.C. 20230.

The motivation subcouncil will identify government and private factors that act as disincentives to energy efficiency in the business sector. It will also identify and evaluate possible new incentives to energy conservation that could be adopted by government and industry.

Widespread distribution of energy conservation materials will be the work of the public awareness subcouncil, chaired by W. W. Boeschenstein, president of Owens Corning Fiberglass Inc. The materials include a film and literature developed by the Commerce Department.

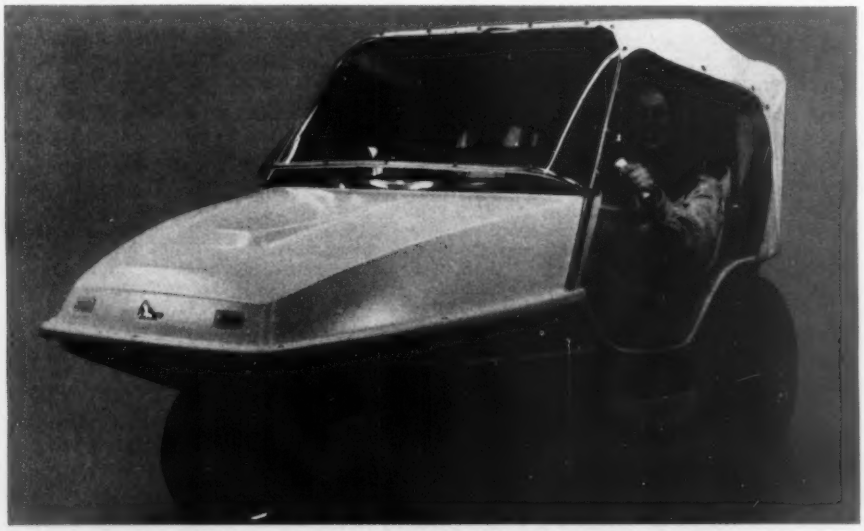
The public awareness subcouncil will also expand use of traditional channels through which business can make employees and customers aware of the need for energy conservation, such as payroll and billing envelope stuffers, bulletin board posters and house organs. It will also seek to discover where industry faces its biggest problems in lack of awareness.

The Rochester firm which drew the Commerce Secretary's attention was Dollinger, Inc., which increased its fourth quarter sales 27 percent and employment 16 percent while reducing energy consumption.

The New England manufacturer cited by Secretary Dent was Perkin-Elmer of Norwalk, Conn. Its ten-point program for cutting back fuel consumption simply involved turning down thermostats, control of ventilation, maintenance of steam pipes and insulation and reducing the temperature of domestic hot water.

American Can Co., the major diversified manufacturer mentioned by Secretary Dent, has expressed confidence that it can effect an additional 7 percent energy savings per unit in 1974. The measure it is using to accomplish this ranges from control of heating and lighting levels to increased use of insulating materials, to the burning of wood bark in place of natural gas.

Secretary Dent is chairman of the National Industrial Energy Conservation Council which is charged with advising the Secretary of Commerce on programs and problems relating to conservation within the industrial and commercial sectors.



PLUG IN OR PEDAL?—*EVI, Inc. introduced its battery-operated People Powered Vehicle (PPV) a year ago. Officials report sales totaled more than 10,000 units. The 1975 model will be capable of 25 miles per hour and have a range of up to 45 miles before recharging.*

Federal Research Data On Instant Call For U.S. Business Projects

Before embarking on that tedious and expensive research project, why not take a few minutes to make sure it hasn't been done already, and is almost instantly available for a fraction of what it would otherwise cost?

About 360,000 unclassified research projects have been conducted or financed by the different agencies of the Federal Government since 1964. Dealing with topics covering almost every aspect of human activity, they are available to American businessmen at the touch of a National Technical Information Service computer. Another 180,000 citations of ongoing and recently completed research projects compiled by the Smithsonian Science Information Exchange are also computer retrievable.

And it's all available from a single location, thus ending the need for businessmen with a need for research to hunt through every corner of the bureaucracy for something that may, or may not, exist, and among agencies with wildly varying capacities for servicing their needs.

NTIS has assembled this enormous storehouse of information in a single computer to help American businessmen enlist today's technology in developing new products, improving old ones, or revising marketing techniques to suit changing demand patterns . . . and at very little cost!

Covers the spectrum

Called NTISearch, the service includes titles giving in-depth treatment to the problems and opportunities facing today's businessman: manufacturing and production, plastics, circuits, water pollution and control, transportation, agricultural economics, radiobiology, fire protection and detection . . . you name it, NTIS probably has it!

Hundreds of new titles are added each day, so the information produced is almost as up-to-date as the morning newspaper.

For speed and thoroughness, there is nothing in the way of data on government research that can touch it. In a matter of minutes, the computer screen lists all relevant titles in the NTIS collection. The computer will then pull abstracts of up to 100 titles for a flat rate of $50, and mail the print-out to the customer within a week. Extra titles cost twenty-five cents apiece. Particularly important abstracts can be copied on the spot by an on-line printer.

Bob Bacchus, a Georgetown, Texas, businessman with modest resources but an eye for a good thing, used NTISearch last year. Since then his fiberglass products firm's business volume has soared by 500 percent, outgrowing its plant in the process. Employment has skyrocketed from eight to seventy, and a payroll of 125 is anticipated for the new plant when it's finished.

"We're delighted with the service; it's been extremely important in the progress and growth of our business," says Bacchus. "We're using it all the time. We found a research report that helped us design a tank that's way out in front of anything else in the field. The expense of the research, if we had had to do it on our own, would have been out of the question.

"It's the first time in many years of dealing with the government that I've gotten an instantaneous response. . . . I got what I needed and I got it right away.

"The only deficiency, if I can call it that, is the lack of general knowledge that such a service is available. I stumbled on it accidentally during the course of a conversation with my Small Business Administration representative in Dallas. It's a tremendous means of expanding knowledge, and it's a shame it's not used more," Bacchus says.

Sample requests

No question is too tough . . . or too simple. Sample requests that have recently been fed into the computer, and which drew up to 100 titles in reply, include:

- What is the concept of failsafe systems, including the specifications, design and testing of such systems?
- Air cushion vehicles—design, operation, dynamics, components. Include anything on any vehicles operating on the same principle.
- Seismic transducers, particularly information on an array of independently operating devices which generate at a common frequency to produce a seismic beam, usually a controlled phase; also generation of, preferably, a sine wave into ground or water.

Of course, the more precisely a request is presented, the more pertinent will be the results.

Actually, the computerized search is simply one of a series of services which NTIS offers to firms and individuals seeking data on Federal Government research. A visitor to NTIS headquarters in Springfield, Virginia or to the NTIS Information Center in the downtown Washington headquarters of the Department of Commerce is first referred to the publications of general interest which are on display. Next, the staff personnel search their own memories; many requests are repeats of earlier inquiries and can be answered from the general knowledge of NTIS personnel. However, if the inquirer needs more information, he can peruse the files of indexes on hand in both offices—indexes for the past six months; indexes for the past ten years; indexes by agency; indexes by subject matter, and indexes of indexes.

Most publications ordered are available on-the-spot at Springfield or within two hours at Main Commerce.

If a trip to the Washington area is not practical, NTISearch is only as far away as your telephone: call either NTIS headquarters (703-451-0560) or the NTIS Information Center in downtown Washington (202-967-3133). Customers are called immediately should any question arise about their search.

For further details, request a free copy of the brochure *NTIS Information Services* (NTIS-PR-73-00) from NTIS, 5285 Port Royal Road, Springfield, Va. 22151.

The National Technical Information Service is a central source for the public sale of Government-sponsored research reports and other analyses prepared by Federal agencies, their contractors or grantees. It fills 5,500 new and 6,000 standing orders a day as one of the world's leading processors of specialty information, supplying the public with more than four million documents and microforms annually. The NTIS information collection exceeds 800,000 titles with more than 100,000 documents in current stock. All are available for sale and a semiannual catalog describes the popular reports.

The agency is directed by statute to recover its costs and has become largely self-sustaining with less than 20 percent of its financing from direct appropriations.

Timely and continuous reporting to subscribers is ensured by continuing agreements between NTIS and hundreds of Federal research-sponsoring organizations. In addition, NTIS is the marketing coordinator for various special technology groups in the U.S., for their publications, technical inquiries and special analyses.

Current abstracts in various categories of interest are published in weekly subscription journals. The abstracts are cumulative and indexed in other subscription series. The magnetic tapes from which the journals are prepared are available as are other magnetic tapes in a wide variety of fields.

A selective microfiche service with a custom profile option automatically provides subscribers with the full texts of abstracted reports.

Unit Generates $215 Million In Minority Sales; Sets Major New Goals For '74

Noting that it generated $215 million in corporate purchases from minorities in 1973, the National Minority Purchasing Council (NMPC) set as its 1974 target the involvement of half of the nation's largest firms and financial institutions in the minority purchasing program.

The $215 million purchases from minority firms in 1973 more than doubles $86 million recorded by the National Council in 1972, its first year of operation.

"Our first and primary goal," said Council Chairman Robert Stuart, chairman of the board of National Can Co., "is to involve an ever-increasing number of corporations in minority purchasing."

Stuart set out the '74 goals at a recent meeting of the National Council and representatives of its regional counterparts in Washington.

Secretary Dent and Alex Armendaris, Director of the Office of Minority Business Enterprise, commended the group for its work to create opportunity in the free enterprise system.

"As the National Alliance of Businessmen seeks to create job opportunities, the National Minority Purchasing Council seeks to create business opportunities," Secretary Dent observed. "And as the Council helps minority businesses to successfully expand their markets with the nation's established corporations, minority businesses will in turn make an even more significant contribution through the creation of jobs, community pride and national product."

Of the 350 corporations working with the National Council and its regional affiliates today, Stuart noted that only 111 are members of the "Fortune 500" listing of the top U.S. industrial firms. The National Council will seek to involve half of the corporations listed in the "Fortune 500," half the nation's 50 largest banks and half the 50 largest utilities in actively purchasing goods and services from minority businesses.

Stuart said the NMPC goals will extend this year to helping minority vendors in a major marketing effort. It will also establish additional regional purchasing councils in selected target cities.

Regional councils

Nineteen regional councils are in operation today, working directly with corporate purchasers to put minority suppliers in touch with corporate buyers who need their products. The regional organizations have identified some 3,000 qualified or qualifiable minority businesses. Regional staffs include bankers, marketing personnel, public relations and urban affairs members who represent many of the technical skills and have the contacts needed by minority businessmen.

The NMPC corporate promotion committee, under the direction of its chairman Augustine Marusi, made a slide presentation which dramatizes the need for the private sector to "take the lead" in developing minority purchasing programs because:

- It has the free enterprise philosophy, the experience, the know-how, the drive and the independence to make it happen.
- These efforts will benefit the majority community as well as minorities. Improving the economic condition of American minorities generates more expendable income. A substantial portion of that income flows back in the form of purchases from the general business community.

Phillip Drotning, National Council vice chairman, said a "how to" manual, designed to assist corporations in developing a successful minority purchasing program, will be ready for distribution this month.

The manual, said Drotning, director of corporate social responsibility for Standard Oil of Indiana, will assist corporations participating with the national and regional councils, and be a key element in attracting a greater percentage of the "Fortune 500" companies to the purchasing program.

A new monthly newsletter being published by the National Council, Stuart said, "is particularly important in this period of supply shortages." It will promote a general awareness throughout the corporate community of the NMPC goals.

Other members of the National Council are:

Theodore A. Adams, Jr., executive director, National Association of Black Manufacturers, Washington; William K. Barry, vice president and director of merchandise, J. C. Penney Co., Inc., New York; Richard J. Bauer, vice president for purchasing and general services, Shell Oil Co., Houston; Harry G. Beckner, president, Jewel Food Stores, Melrose Park, Ill.

Berkley Burrell, president, National Busi-

GOALS DISCUSSED—*New targets of the National Minority Purchasing Council being chartered by members and regional representatives (from left) Walter Stuart, vice president, First National Bank of Commerce, New Orleans; Jim Troka, Sears, Roebuck and Co.; Ted Adams, National Association of Black Manufacturers; Bart Neese, National Association of Purchasing Managers; Bill Rieke, Lockheed; and Natalie Lang, Booz, Allen and Hamilton. The national panel is leading the private sector effort.*

PRIVATE SECTOR ACTION—*Robert Stuart (left), chairman of the National Minority Purchasing Council, and Phillip T. Drotning, vice chairman, listen to committee reports mapping '74 work of the private sector in increasing purchases from minorities.*

ness League, Washington; James W. Button, senior merchandising vice president, Sears, Roebuck and Co., Chicago; Gerald F. Evans, vice president, National Association of Educational Buyers, Athens, Ohio; Marshall Evans, vice chairman, Westinghouse Electric Corp.; Arthur G. Foster, vice president, purchasing and transportation, Western Electric.

Karl G. Haar, Jr., president, Aerospace Industries Association of America, Inc., Washington; Thomas Houser, partner, Sidley, Austin Attorneys at Law, Chicago; Alfred E. Jones, vice president of purchasing and transportation, Koppers Co., Inc., Pittsburgh; James H. Jones, president, First National Bank of Commerce, New Orleans; Stephen F. Keating, president, Honeywell, Inc.

Natalie Lang, director, national urban affairs program, Booz, Allen and Hamilton, Inc., Chicago; Vice Admiral Joseph Lyle, president, National Security Industrial Association; Augustine R. Marusi, chairman and president, Borden, Inc.; Peter McNeish, director, urban and community affairs, American Bankers Association.

Arthur F. Mitchell, vice president for corporate purchasing, Greyhound Corp., Phoenix, Ariz.; Arthur Negrete, president, National Economic Development Association, Los Angeles; Steven Nelson, division director for material, traffic, transportation space division, Rockwell International; C. J. Patterson, president, C. J. Patterson Co., Oakland, Calif.; William Rieke, executive vice president, Lockheed Aircraft Corp.

Regional purchasing council chairman and staff contacts are:

Chicago—James Button, chairman; Jesse Sharpe, contact. Cincinnati—Jack J. Thacker, chairman; John Smedley, contact. Cleveland—Rolland F. Smith, chairman; Charles P. Lucas, Jr., contact. Columbus, Ohio—Daniel W. Cantwell, chairman; James B. Burton, contact. Dallas—Lew D. Zale, chairman; T. David Jones, contact. Detroit—Cecil C. Chauvin, chairman; Paul J. Kramer, contact.

Gulf South—James H. Jones, New Orleans, chairman; Elihu Brayboy, contact. Houston—Richard Bauer, chairman; Bill Russell, contact. Memphis—Mel Grinspan, chairman; Clifford Stockton, contact. New York—Arthur G. Foster, chairman; Frank Bell, III, contact. Philadelphia—R. Anderson Pew, chairman; John Rich, contact. Phoenix—Arthur A. Mitchell, chairman; James E. Salmon, contact. St. Louis—Stephen Clark.

Washington—Walter F. McArdel, chairman; Richard N. Hykes, contact. San Antonio—George W. Craig, chairman; Jack Gilmore, contact. North Carolina—Otto C. Schenk, chairman; Charles W. Lent, contact. Pittsburgh—Robert B. Pease, chairman.

EXCHANGE OF THOUGHTS—*Members of the National Minority Purchasing Council and regional council representatives exchange ideas during recent meeting at the Commerce Department. Goals for '74 include more private sector involvement.*

Industry Highlights

Fertilizer Shortfall Likely Despite Rising Production

(Industry Highlights is prepared by the Office of Business Research and Analysis, Bureau of Domestic Commerce.)

The net domestic supply of fertilizer in crop year '74 will be about 21 million tons or 9 percent greater than in crop year '73, but still 8 to 12 percent short of demand, the Department of Agriculture estimates.

Demand for fertilizer is increasing because farmers intend to increase acreage of many crops. Net farm income in 1973 was the highest on record, which will help farmers fund larger fertilizer purchases and attempt to increase acreage yields.

The major factors leading to increased supply are increased projected production of all three nutrients (nitrogen, phosphate and potash), projected reductions in exports of nitrogenous fertilizers and a near 40 percent increase in net imports of potash.

Nitrogen

Production of anhydrous ammonia, the basic for almost all nitrogenous fertilizer, increased by about 12 percent for the first five months of the 1974 crop year. (The crop year parallels the fiscal year—1973 ended June 30, 1973.)

Based upon the current rate of production, adjusted for inventory change, this means 10.2 million tons of domestically produced nitrogen during crop year 1974, or an increase of almost 675,000 tons more than for crop year 1973. For the first five months of the crop year exports of nitrogenous fertilizers have increased slightly—less than 100,000 tons—over the comparable 1973 period with most of the increase being in shipments of anhydrous ammonia and diamonium phosphates.

However, as part of the recent price decontrol action, domestic producers have pledged to divert substantial tonnages from the export market to domestic use. The Department of Commerce's export monitoring system indicates that most producers are substantially reducing export commitments of nitrogenous fertilizers under 1973 actual exports. Imports of nitrogen materials have been slightly higher this year but they account for a small percentage of U.S. apparent consumption.

Despite the lower beginning inventories of this crop year, a combination of substantially increased production, stable exports and somewhat higher imports should result in a slight increase (7 percent) in nitrogenous fertilizer materials available to the American farmer this crop year.

A net supply of about 9.8 million tons of nitrogen is expected for fertilizer crop year '74. But in the process of distributing the nitrogen materials to farmers, an additional amount equal to 7 to 10 percent of the final consumption will be needed to cover such items as handling loss and unused retail inventories. Thus, the estimated requirements for crop year '74 are 10 to 10.2 million tons.

This results in an estimated shortfall of as much as 5 percent this year.

Phosphatic fertilizers

Production of all phosphatic fertilizers this crop year has been close to last year's figure. A small increase in the production of wet process phosphoric acid was offset by decreases in the use of electric furnace-produced acid for fertilizers. Production is expected to be about 6.5 million tons, slightly greater than last year.

Exports of phosphatic fertilizers are expected to marginally exceed exports of last year even though industry has curtailed export orders from planned '74 levels.

Imports are at or below last year's level, but account for less than 5 percent of net supply.

Producer inventories at the beginning of this year were approximately equal to beginning inventories for the '73 crop year, although there is some evidence to suggest stocks at retail outlets were lower.

On balance, there may be 5.2 million tons of phosphatic fertilizers available in crop year '74, about the same as the '73 crop year. To service the estimated demand of 5.5 million tons of phosphate the total requirement is expected to be about 5.9 million tons. Thus, there may be a shortfall of about 12 percent in the supply of phosphates.

While some shortages of potash have been reported, they appear not to relate to a general imbalance in supply and demand, but rather to lags in distribution. Shipments of potash are up 46 percent this crop year. A surplus of 815,000 tons is projected for this crop year.

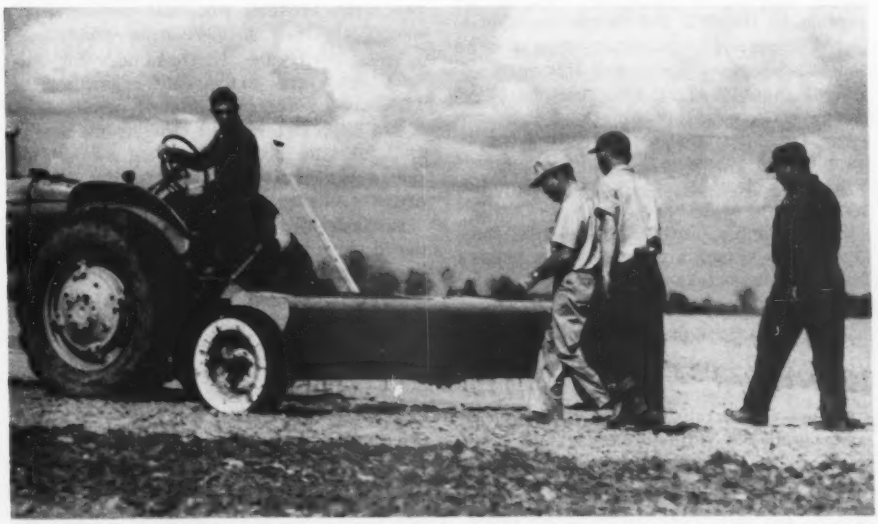
Despite the projected increases in domestic fertilizer availability over the full '74 crop year there will be less fertilizer available for spring application this year because fall distribution and sales of both nitrogen and phosphates were appreciably higher than usual. A Department of Agriculture survey of 14 states indicated a 44 percent increase in July-November 1973 sales of the three major fertilizer nutrients.

Producer prices have increased to levels higher than was expected when the Cost of Living Council exempted fertilizer materials from price controls. According to a telegram survey by the Council, domestic producer prices have increased 65 percent on average over controlled price levels of Oct. 25, 1973. These increases have been reflected in the retail prices of fertilizers charged to the farmer.

Telegrams to producers

The Council has sent telegrams to 60 producers of fertilizer requesting their intentions with regard to fertilizer materials prices through June 30. The replies received from all major producers indicate that current price levels will be maintained and no additional price increases are intended unless there are substantial increases in production costs.

The Internal Revenue Service will monitor on a regular basis fertilizer materials prices charged by manufacturers for the



SUPPLY IN QUESTION—*A farmer walks behind fertilizer applicator to determine whether proper amount is being applied. Fertilizer may remain in short supply this crop year.*

balance of the crop year ending June 30.

In addition to decontrol of prices, a number of other actions have been taken to increase domestic production and availability, improve distribution and maximize the benefits of fertilizer application.

The most pressing problem has been to assure adequate supplies of feedstocks for the production of nitrogen fertilizers and of fuel to operate both nitrogen and phosphate manufacturing facilities.

The Interagency Committee on Fertilizer Production and the Department of Agriculture have indicated to the Federal Power Commission the importance of natural gas for the production of ammonia. To date, the Federal Power Commission has granted assistance to ammonia producers.

In those cases where plants have relied on gas regulated by state authorities, the Interagency Committee has informed the appropriate state agency of the need for natural gas for ammonia production, and the nature and extent of the possible fertilizer shortfall.

Although there have been several cases of fertilizer production being slowed or curtailed due to the lack of fuel oil allocations —particularly for residual fuel oil—the local Federal Energy Office offices have been decisive in favor of the fertilizer producer's processing requirements.

Transportation difficulties have been a traditional problem for this industry, particularly in February and March when large tonnages are normally moved from inventories to retail distributors and farmers.

A shortage of railroad hopper cars and covered cars continues to exist. For example, there are reported shortages in the Florida area of hopper cars for shipment of phosphate rock and phosphate-based fertilizers, and shortages of ammonia cars which are specially equipped for pressurized shipment.

Shortages also appear to be serious in the Midwest where shipments of grain are above normal levels. On the other hand, with larger than normal shipments from the inventory in the fall, the normal transportation difficulties of this industry appear to be somewhat less serious overall this year.

Realizing that there will continue to be some shortage in the balance of this crop year, the Department of Agriculture has attempted to maximize the benefits received by the American farmer from those supplies which will be available.

For example, extension agents have launched a vigorous campaign encouraging farmers to undertake soil tests.

Copper, Wood Now Included In Defense Priorities System

The U.S. Department of Commerce amended the Defense Priorities System to make domestic refined copper and wood pulp subject to ratings under DPS Regulation 1, effective Feb. 4. The actions were taken to permit defense contractors to acquire these materials to meet defense requirements in a timely manner.

Ferrous Scrap Price Controls Lifted; Export Policy Set

Sale of all ferrous and ferro-alloy scrap has been exempted from Phase IV price controls and announcement made that exports of up to 2.1 million tons of ferrous scrap will be licensed during the second quarter.

Secretary Dent, a member of the Cost of Living Council, and Dr. John T. Dunlop, Council director, announced the actions.

"The exemption of ferrous scrap sales should allow traditional marketing patterns to reassert themselves and thus eliminate supply and price distortions caused by a two-tiered price structure for scrap."

Commenting on the export licensing quota for ferrous scrap, Secretary Dent said "I am announcing the second quarter licensing policy at this early date as a contribution to market stability, which is essential for orderly planning."

The decision to exempt all purchased ferrous scrap was taken to relieve market disruptions caused by increasing distortions of price and supply. Previously, only obsolete scrap, which is used or damaged ferrous scrap such as that sold by small scrap junk dealers, was exempted from price controls either under the damaged or used product provision or the small firm exemption section of the Economic Stabilization Act.

A two-tiered price structure for ferrous scrap has existed because prompt ferrous scrap, which is generated by steel fabricators in such major industries as auto manufacturing, is an industrial by-product with controlled prices. However, most ferrous scrap is moved through a market heavily affected by ferrous scrap dealers and scrap brokers, who, due to the small size of their firms, have been exempt.

The prices paid by consumers for ferrous scrap are comparable regardless of whether the scrap is prompt or obsolete. It has been determined that strong export and domestic demand are the two major causes for current high ferrous scrap prices.

Because of the development of a two-tiered price structure marketing distortions have appeared. As the gap between the controlled price and the market price for produced scrap widened in recent weeks, firms have chosen not to sell in their market area, but to ship to other plants of the company outside their market areas. Not only has this reduced supplies by the amount in transit but it has created pricing distortions within market areas.

The composite price of No. 1 heavy melting ferrous scrap increased 34 percent in the five-week period between Jan. 1 and Feb. 8—from $76 to $103 per ton. Some firms are currently paying $120 or more per ton. The Cost of Living Council and Commerce actions were taken to stem this rapid price escalation.

"The Council recognizes the severe impact of these scrap price increases on many producers and is reviewing its policy of scrap cost pass-through," Dr. Dunlop added.

The country quotas for ferrous scrap will be governed by the same policies in effect during the first quarter and will be based on historical patterns for the base period, which is July 1, 1970 through June 30, 1973. The second quarter quotas will be allocated among ferrous scrap exporters by type of scrap.

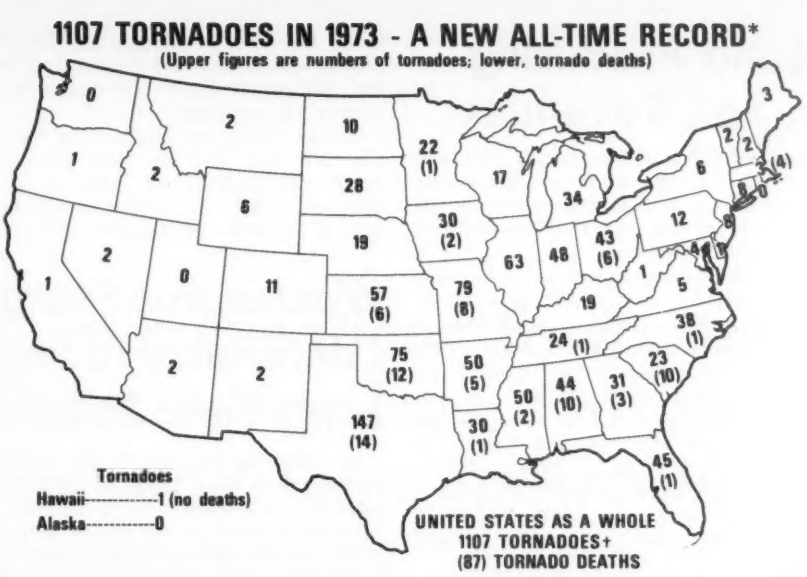
Commerce will issue a bulletin describing in detail the new licensing system. As has been the case in the first quarter, 100,000 tons of the 2.1 million ton quota will be set aside for special hardships and newcomers.

SCRAP TO STEEL—*This giant collection of ferrous scrap eventually will find its way into a Bethlehem Steel Co. furnace where it will be made into new steel products.*

In terms of scrap consumption by the steel industry 81.2 million net tons were consumed in 1973 with 50.4 million tons produced internally mainly as prompt scrap and 35.5 million tons were received from domestic sources. Inventory drawdown by the end of 1973 from stocks on hand at the beginning of the year was one million tons and 5.7 million tons were shipped, transferred or otherwise disposed of by the steel industry.

Production in 1973 of ingots and castings were at all time highs of 150 and 20 million net tons, respectively.

Ferrous scrap export in 1973 reached an all time high of 11.3 million net tons compared to the previous high of 10.4 million tons exported in 1970.



STATE-BY-STATE—*Totals of 1973 add to 1111 because four storms crossed state lines.*

Early Warning Proves Value During 'Year Of The Tornado'

Still a bit breathless after 1973—"The Year of the Tornado"—the National Weather Service is once again launching Operation SKYWARN to cut down loss of life from tornadoes. A record number of 1,107 of the deadly twisters touched down on the U.S. landscape last year. The previous high of 929 was set in 1967.

Each year, the Weather Service—a component of the Commerce Department's National Oceanic and Atmospheric Administration—launches SKYWARN before the peak of the tornado season to encourage community leaders to prepare for the violent whirlwinds. It recommends recruiting volunteer storm spotters and stresses the value of informing people of ways to shield themselves against tornadoes.

Because tornadoes are so erratic and sudden in onset, the best way to deal with them is preparedness—a well-rehearsed plan for quick action when a tornado has been reported in the area. Such plans save lives, and have resulted in a persistent drop in the average number of tornado fatalities reported annually during the past three decades, compared to the steady rise in U.S. population and the long-range increase in tornadoes reported.

Fewer fatalities

Deaths due to tornadoes are well below the 1925 record of 794. During the 1940s, an average of 179 persons died each year. In the 1950s, when the present tornado forecasting and reporting system was established, the annual average dropped to 141 fatalities, and, in the sixties, as the preparedness program spread, to 94 fatalities. During this same 30-year period, U.S. population grew by more than 50 percent—from 130 million to 200 million. The annual average number of tornadoes reported rose from 155 in the forties, to 479 in the fifties, to 681 in the sixties. Part of the latter rise is due to a better system of reporting, of course, but part also is surely due to the presence of people in places where there was no one before.

The trend is continuing into the seventies. In 1970 there were 652 tornadoes and 72 tornado deaths; in 1971, 889 tornadoes and 156 deaths; in 1972, 741 tornadoes and 27 deaths; and in 1973, 1,107 tornadoes and 87 deaths. If the trend of the seventies continues, the average for the decade will be somewhere around 1,000 tornadoes a year accompanied by fewer than 90 fatalities.

Year had everything

"The 1973 tornado season can only be described by the liberal use of superlatives. It had the most, lasted the longest, involved more states and produced more super tornadoes than any year since tornado records began," wrote Allen Pearson, Director of the National Severe Storms Forecast Center, in a year-end review.

In addition to the record of 1,107 tornadoes for the nation as a whole, there were 11 states which also had record numbers—Arkansas, Illinois, Indiana, Michigan, Mississippi, Missouri, Kentucky, New Jersey, North Carolina, Ohio, and Tennessee. Only four reported no tornadoes—Alaska, Rhode Island, Utah, and Washington.

The increase in North Carolina was particularly dramatic. In the past 58 years North Carolina had never reported more than 7 tornadoes in any one month. In May it had 32. And then there was Indiana: it had 30 tornadoes in the month of June alone and 48 for the year, compared to a long-term average of 22.

While admittedly the reporting networks are superior to those of years past, the total of 94 tornadoes reported from May 26 to 28 equaled the number of tornadoes reported during the entire year of 1931.

It was also a year with scores of long-lived tornadoes, the most notable being the twister that left a track 158 miles long from northcentral Kansas into Nebraska on September 25, and the 135-mile-long track in central Alabama May 27. These two storms were among the most violent on record.

Total property damage from tornadoes during 1973 amounted to more than half a billion dollars.

Whether or not a trend of more and bigger tornadoes is developing no one can say, but last year's widespread outbreaks underscore the fact that no one in the U.S. should feel that "it can't happen here."

The Weather Service urges officials in schools, hospitals, factories, and large apartment complexes to develop special preparedness plans. A booklet telling how to set up an effective program is available to community and other leaders. Send requests to the Public Affairs Office, National Weather Service, 8060 13th Street, Silver Spring, Md. 20910. Ask for "Tornado Preparedness Planning" and identify the position you hold.

All U.S. Earthquakes Now Listed In Single Volume

A nontechnical history of the prominent earthquakes in the United States and Puerto Rico through 1970 has been published by the Environmental Data Service, an agency of the Commerce Department's National Oceanic and Atmospheric Administration (NOAA).

Titled *Earthquake History of the United States*, it contains brief descriptions of practically all earthquakes of general interest, and presents regional tables that give data, time, locality, epicenter, felt area, and authority for each tremor. The publication combines data previously listed in two separate reports: *Earthquake History of the United States, Part I, Stronger Earthquakes of the United States (Exclusive of California and Western Nevada)*, and *Part II, Stronger Earthquakes of California and Western Nevada.*

Order *Earthquake History of the United States* for $2.80 per copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Each Tourist Dollar Found Producing More Than 7 Cents In Tax Revenues

For every dollar lost through any curtailment of tourism spending, American tax revenues will decline by an estimated seven cents.

The United States Travel Service estimates that 7.2 percent of tourism spending in the United States ends up in federal, state or local tax coffers.

Based on that estimate, tourist spending in the U.S. during 1972 generated $4.3 billion in taxes. A total of $3.2 billion was spent by foreign tourists alone, which provided $230 million in taxes.

"Tourism spending represented approximately $20.40 in tax receipts for every man, woman and child in the nation that year, the most recent for which we have figures," according to C. Langhorne Washburn, Assistant Secretary of Commerce for Tourism.

"Thus we have another reason for protecting tourism during the energy crisis," he noted.

Washburn pointed out that tax revenues brought in by tourism generally represent funds given to the nation or a community by people who don't stay around to use the schools, roads and other facilities and services they help support.

Tourism spending is even more meaningful for residents of the eight states where tourism receipts exceeded $1 billion in 1972. Three states — Florida, Nevada and Hawaii — list tourism as their number one industry in terms of income.

"It is estimated that nearly four million American jobs are supported directly or indirectly by tourism," Washburn stated. "Employment of people in this industry is as vital to the U.S. economy as jobs in manufacturing, food production, or any other pursuit.

"The economic well-being of the industry can be assured, even in the face of the energy crisis, if we become travel educators as well as travel promoters," Washburn said. "We must help people learn new travel patterns and teach them to approach tourism in different ways."

Students Apply Theories To Aid Small Firms

The Small Business Institute is a little more than a year old and small businessmen are already calling it one of the most successful weapons in the Small Business Administration's arsenal of programs.

Begun in 1972 with 36 Schools of Business Administration around the country, the program has grown to include 150 participating schools. Under the supervision of university faculty and SBA staff, senior and graduate students work directly with owners of troubled firms.

SBI management help goes to selected small businesses which have received SBA loans or other assistance. The student counselors provide management counseling and advice to SBA clients in the communities surrounding their schools.

Fifty-two percent of the more than 1,000 firms counseled during the program's first six months said they had made changes in their operations following student advice. Most of the changes were in the area of record keeping and accounting procedures, advertising and sales promotion programs. At least partially as a result of the counseling, SBI's clients said they anticipated an average sales increase of 46 percent during the coming year, and a 36 percent rise in profits.

Participants run the gamut of service, retail, manufacturing, wholesale and construction firms, representing everything from professional divers to producers of electronics equipment.

Although the firms counseled in the first year of the program had been in business an average of six-and-one-half years, SBI will eventually expand its program to include pre-borrower assistance, and provide preventive as well as remedial counseling.

University participants said they rated the program an important aid in bridging the gap between the academic and business worlds. Moreover, 53 percent of the students reported that they had been influenced toward small business ownership and management.

Productivity Meeting To Probe Service Area

The Third Conference on Productivity Improvement in the Service Sector of the National Economy will be held on the campus of Franklin Pierce College, Rindge, New Hampshire, July 28-Aug. 4.

Sponsors of the conference are the National Commission on Productivity, the Engineering Foundation and the Commerce Department's Office of Telecommunications and National Bureau of Standards (NBS).

The conference is expected to attract representatives of government, labor, industry, education and the public to assess their role in the use of information transaction technology to increase the productivity of service industries. Possible future conference topics include consumer, labor and management implications for productivity improvement as well as education, training and mechanization in the field.

Attendance is limited to 100 persons and is by invitation or application. The conference fee is $180 for registration, lodging and meals. Single occupancy rooms carry a $15 surcharge.

Contact either the Engineering Foundation, 345 East 47th St., New York, N.Y. 10017, (212-752-6800, ext. 284), or Elaine Cardone, Office of Telecommunications, 1325 G St., NW., Washington, D.C. 20005,

Washington Energy Conference To Seek Long-Term Solution

An upcoming conference will bring together leaders from Congress, government, business, science, labor, the media, and environmental and consumer groups to explore today's energy choices and tomorrow's alternative sources April 24-25 at the Washington Hilton Hotel.

Sponsored by the World Future Society, the meeting, "Energy: Today's Choices, Tomorrow's Opportunities," will seek long-term solutions to the energy problem by focusing on: the underlying causes of the current energy crisis, the availability and applicability of alternative sources of energy, global strategies necessary to fulfill the energy needs of all nations.

Among the scheduled speakers will be Congressman Mike McCormack, who holds a Master's degree in chemistry; Leonard Woodcock, President of the United Automobile Workers; Commissioner William O. Doub of the U.S. Atomic Energy Commission and Glenn T. Seaborg, former AEC Chairman; Carl Madden, Chief Economist of the U.S. Chamber of Commerce; Jack Conway, President of Common Cause; Beatrice Willard, member of the Council on Environmental Quality; Orville Freeman, former Secretary of Agriculture; W. Donham Crawford, President of the Edison Electric Institute, among others.

In addition to formal presentations, experts will host 15 topical sessions on the interrelationship of consumer, business and government actions, as well as the traditions, practices, myths, and varying human values which underlie the present energy situation.

Further information is available from the World Future Society, 4916 St. Elmo Ave., Washington, D.C. 20014, (301-656-8274).

Calendar For Businessmen

March 18-21 — Washington — Information Industry meeting and resources exposition, sponsored by the Information Industry Association. For information and registration material, IIA, 4720 Montgomery Lane, Bethesda, Md.

Communications Equipment Sales In Far East: Prospects For Long Term Substantial

"Long-range prospects are enormous." This is the dot/dash message for communications suppliers from a recent U.S. trade mission to Singapore, the Philippines, and Taiwan.

A 10-member group offering a variety of equipment — including telecommunications, microwave, radio and TV systems and components — and consulting services, pointed out that competitors have been active for many years in all three markets. "But," said Mission Director John G. McMurtry, "the climate is right as of now for the United States to capture more and more of the rapidly increasing potential." McMurtry heads the Commerce Department's Denver District Office.

Members agreed that immediate sales—which were negligible during the two-week stay—were not expected, because of the sophisticated nature of their products, the type of market (limited basically to the utilities industries and government), and frequently, the necessity for extensive field trials of equipment under consideration. Sales estimates for the next year total about $2 million: in Singapore $750,000; Philippines, $302,000; and Taiwan, $920,000.

McMurtry pointed out that the estimates by country reflect the relatively established picture in Singapore, uncertainty about industry plans in the Philippines, and a feeling of optimism in Taiwan resulting from the enthusiastic reaction by industry leaders to the mission—the first of its kind to the Republic of China.

Singapore: service needed

Among officials whom the mission met in Singapore were representatives of the Telephone Board, Telecommunications Authority, and the Civil Aeronautic Authority.

"The economy, especially banking and multinational manufacturing activity, is severely straining Singapore's ability to keep up with telex and telephone services," McMurtry reported. Although the country's telephone density is already one of the highest in East Asia, nine new exchanges are to be added to the network and another five existing exchanges are to be extended, he said. Tenders are to be called in 1974 for 120 pulse modulation systems. Electronic exchanges will be introduced by 1980.

Philippines: timely visit

Government executives, chamber of commerce officials, and representatives of the engineering community were among the mission's contacts in Manila. "A most timely visit in view of the government's program for telecommunications," said one of the mission members.

General Carreon, chairman of the Philippine Board of Communications, told the group that plans call for an expansion in the telephone industry of some 13 to 15 percent. The present system is inadequate to serve a population of 40 million, he said, and the government is giving high priority to completing backbone facilities in Mindanao, Northern Luzon and Palawan with feeder line construction in Mindanao, Northern Luzon and Visayas. He added that expansion of broadcasting facilities promises new markets, particularly in Mindanao and other outlying areas.

It was reported to the mission that "due to a recent rate increase, the country's second largest telephone company will expend its plant 130 percent over a 4-year period."

Improvement in telephone density, now low by comparison with Singapore or Taiwan, and expansion in radio stations and telegraphs is planned.

One mission member estimated systems sales in this market at $2 million per year beginning in 1976. "Prospects for the U.S. communications industry will be increasingly favorable and growth in imports from the United States should be expected from both existing and new suppliers," said McMurtry.

Taiwan: historic event

"This mission is an historic event," said George K. J. Lee after briefing the group in the office of the Director General of Telecommunications in Taipei. "It is very wel-

COMMUNICATIONS IN SINGAPORE—*Mission members visited the Telephone Board, and observed equipment in use. Above, listening to supervisor (second from left) are (from left) K. S. Wang, Quindar Electronics; Justin P. Carlino,* MERI *Corp.; L. W. Salsbery, 3M Co.*

SWITCHING SYSTEM — *Also at Phone Board, Mission Member Thomas F. Forrester (second from left) of TAI, Inc. and Thomas R. Moore (second from right) of Intelect, Inc. inspect the switching system.*

come. The Japanese have done it every other year for 15 years." Lee guided the mission on tours of the Taipei Microwave Station and Gateway Exchange, the Toll and International Switchboard rooms, and later the Pacific Region Satellite Communication earth station and the recently completed Indian Ocean Region earth station. Director General H. C. Fang said: "The energy crisis may produce a surge in the use of electronic communications. We don't use much raw material nor energy materials."

As an indicator of the U.S. export potential in the Taiwan market, McMurtry listed nine priority projects scheduled for completion in or before 1978. To help finance these projects, carrying a price tag of $2.4 billion, Premier Chiang Ching-Kuo said that the Government is planning to float national reconstruction bonds.

Members of the mission, and the firms they represented, were: Justin P. Carlino, MERI Corp., Mountain View, Calif.; Thomas F. Forrester, TAI Inc., Bangkok; Steve King, Anaconda Telecommunications, Anaheim, Calif.; Thomas R. Moore, Intelect, Inc., Honolulu; T. Allen Pelsue, T. A. Pelsue Co., Englewood, Colo.; Jack H. Pruitt, Jack Pruitt Enterprises, San Jose, Calif.; Donn E. Seeley, ITT Far East & Pacific, Inc., Hong Kong; R. Clyde Sessions, Lynch Communication Systems, Reno, Nev.; Edward E. Timm and L. W. Salsbery, 3M Co., St. Paul; and K. S. Wang, Quindar Electronics, Inc., Springfield, N.J.

U.S. Machine Tool Prospects Explored In Brazilian Cities

Brazilian industrial production levels are now bumping up against plant capacities and that means opportunities for sale of U.S. machine tools, according to a trade mission just back from Rio de Janeiro, Belo Horizonte and Sao Paulo.

The mission, organized by the National Machine Tool Builders' Association and led by John A. Connor, NMTBA international trade director, talked with executives of many of the various Brazilian manufacturing industries. Connor points out that the industrial sector is pacing the country's economic growth. Key transport systems and numerous factories are working at or near capacity.

A stable economic and political environment in conjunction with extensive Brazilian government incentive programs to expand domestic production and production for export has attracted considerable investment. For example, under a 1972 decree, whole factories may be imported without payment of import duties if the production is destined primarily for export.

The U.S. dollar devaluation, the lower rate of inflation in the United States than in Japan and much of Western Europe, and the availability of Eximbank credit all help to place the U.S. exporter in an advantageous position. The U.S. businessmen went down to explore resulting prospects.

In Rio, the Commerce-assisted mission toured Fundiluse S.A., a steel foundry providing components to such equipment manufacturers as rock crushers, shakers, and conveyors for the mining industry. The U.S. group observed that the machine shop is equipped with low-volume tools, many of which are obsolete, and the firm's management is aware that much of the equipment must be replaced. One of the company officials has just returned from Europe and another is planning a visit to the United States to investigate the possibility of purchasing replacements.

In Belo Horizonte, Brazil's second largest industrial city and the capital of Minas Gerais, the mission met with the State's Secretary for Industry and Commerce. Here the thrust was toward spurring investment.

In Sao Paulo, the U.S. group was invited to General Motors do Brazil, where, according to Connor, "mission members gained the impression we had in so many other places—that business is booming in Brazil, that all the major companies are either in the process of expanding their facilities or have plans to in the immediate future."

"All in all," concluded Connor, who has headed several NMTBA overseas trade teams, "this mission was productive and business was consummated by some of the participants during their stay in Brazil."

New Reports Will Align Trade Data

Sharpening its foreign trade reports as tools for the study of competitive conditions in the U.S. market and improving their international comparability, the Census Bureau will now issue data on imported merchandise under three valuations:

► The "f.a.s." value—"free alongside ship"—representing the transaction value at the foreign port of exportation.

► The "c.i.f." value—"cost, insurance, freight"—representing the value at the first U.S. port of entry, and including purchase price and the freight, insurance and other charges (but not import duties) to bring the goods to that point.

► The Customs value—generally representing the value of the merchandise in the country from which it is sent. Customs valuation is legally established under provisions of the Tariff Act of 1930, as amended, for determining import duty. In varying circumstances it may reflect an export value, a constructed value, the American selling price in the case of certain chemicals, etc., and often does not reflect an actual transaction value. Up to now it has been the sole basis for reporting U.S. import data.

No changes are being made in the reporting basis for U.S. exports. Export totals continue to be based on "f.a.s." valuation. Use of this valuation provides the comparability on imports and exports that is needed in balance of payments computations.

The "c.i.f." value has significance in that most other countries report their import data on this basis. Thus presentation of U.S. import data on this basis makes our trade statistics more comparable with those of our trading partners. It also permits better analysis of the competitive impact of imports of specific commodities.

As indicated above, the "f.a.s." data are provided for balance of payments analysis. This is not possible with the "c.i.f." data since the freight and insurance payments involved often accrue to the benefit of a third country.

Import data based on all three values are being published in a variety of foreign trade statistics reports and reference tabulations. Principal among these are FT 990, *Highlights of U.S. Exports and Imports;* FT 135, *U.S. Imports, Commodity by Country* (Schedule A classifications); and a new monthly publication: FT 146, *U.S. Imports for Consumption,* which shows data in terms of the Tariff Schedules of the United States Annotated (TSUSA) commodity by country arrangement for all three values on a monthly and cumulative basis. **(See ad, back cover.)**

CANADA MEETING FOR U.S. COMMERCIAL SPECIALISTS—*U.S. Ambassador to Canada Adolph W. Schmidt (at head of table) reviews programs to expand U.S. exports to Canada with Commerce and State Department officials from Washington, U.S. Commercial Officers stationed across Canada, and Commerce Department District Office Directors from the northern United States. The meeting was held in Ottawa earlier this year.*

Targeted Export Expansion Program Honed At Officials' Canada Meeting

U.S. firms seeking to initiate or expand exports to Canada will benefit from an Ottawa conference held earlier this year for U.S. Commerce and State Department officials serving on both sides of the border.

The host, keynoter and an active participant in the conference was Ambassador Adolph W. Schmidt. Co-chairmen were Deputy Assistant Secretary of Commerce Marinus van Gessel, who heads the Bureau of International Commerce, and Deputy Assistant Secretary of State Daniel M. Searby. Washington officials of the Commerce and State Departments made detailed presentations and led the panel discussions.

For the first time, all the U.S. officers engaged in commercial activities in Canada were brought together. They came from Ottawa, Calgary, Halifax, Montreal, Quebec, St. John's, Toronto, Vancouver and Winnipeg.

They were joined by the directors of the Commerce Department District Offices in the northern United States, including Anchorage, Boston, Buffalo, Chicago, Cleveland, Minneapolis, New York and Seattle.

A clearly-defined, coordinated and targeted plan of operation called "The Country Commercial Program for Canada" was the focus of the meeting at the U.S. Embassy. The program lays out goals and activities for the year beginning July 1.

World Trade Centers Group To Meet In London In July

About 250 delegates from 34 countries are expected in London July 17-25 for the annual General Assembly of the World Trade Centers Association, to be held at the $120 million London World Trade Centre in the St. Katherine-by-the-Tower district.

The World Trade Centers Association, which was founded in 1968 in New Orleans, is an independent, nonprofit-making organization which promotes and coordinates trade centers around the world. There are centers built, under construction, or in an advanced stage of planning in the United States, Canada, New Zealand, Singapore, France, Holland, Hong Kong, Spain, Italy, Belgium, Germany, Japan, Senegal, Korea, Zaire, India and Panama.

The London World Trade Centre is an enterprise of the Taylor Woodrow Group and the Greater London Council. Members include banks, shipping firms, commodity traders, insurance companies, trade associations and other commercial and industrial firms.

When fully completed, in 1978, the London Centre will incorporate conference and exhibition facilities, trading floors, a full range of business services and residential accommodation. The first phase is now nearing completion and includes the first part of the trading center, an 826-room Tower Hotel, and a yacht haven.

AN EXPORT PROMOTION MULTIPLIER—*The Iowa Development Commission has been recognized by the Commerce Department for outstanding efforts in expanding exports, with Governor Robert D. Ray accepting the honor from Commerce's Des Moines District Office Director Jesse N. Durden. From left are Delmar Van Horn who heads the commission, Governor Ray, Durden and Dean Arbuckle, the commission's trade specialist.*

OFFICE EQUIPMENT FAIR—*The presidentof the 13th annual* SIMO *exhibition in Madrid, L.A. Petit Herrera (right), visits one of the stands, accompanied by W. R. Vitous (center), U.S. exhibition director, and I. Orduna of Proco S.A., Datagraphix distributor for Spain.*

AT ANOTHER U.S. EXHIBITION IN SPAIN—*The World Fishing Exhibition in Vigo, Spain, included a U.S. pavilion. George A. Stevens (left at table), of the Mississippi Marketing Council, who served as technical representative for the U.S. industry, here explains their marine electronics, heavy deck gear, fish processing machinery and refrigeration equipment to the Spanish press. One of the ten exhibitors, Morrow Electronics, Salem, Ore., projects $1 million in sales of its Loran equipment as an upshot of the show, plus conclusion of 10 sales representation agreements and a joint venture.*

U.S. Office Equipment Has Madrid Exposure, Finds Receptive Market

A dozen firms that exhibited computers and other advanced business equipment at a Commerce-sponsored exhibition held in conjunction with the International Office Equipment Fair at Madrid late last year found an attractive and growing market for their products.

Spain has one of the world's fastest expanding economies, and the market for business and data processing equipment is growing by 25 percent annually. As domestic production of advanced business equipment is relatively small, most of the demand will be supplied by imports.

Attendance during the 10-day fair, which is Spain's leading show of business equipment, totaled 140,000, with a solid number of trade visitors. Firms at the U.S. exhibition developed 491 sales leads. In addition, 7 representational agreements were concluded during the show; 9 are expected to be concluded soon. The three new-to-market exhibitors project sales reaching $600,000.

The next fair in this series will be held in November in Madrid. Although there will be no official U.S. participation, individual American firms may apply directly to the management at Palacio de Exposiciones de la Camara Oficial de Comercio, C.I.T.E.M.A., Plaza Conde del Valle Suchil 8, Madrid 15.

African Food Congress Invites U.S. Companies

Representatives of U.S. agribusiness companies, especially food processing and packaging machinery suppliers, are invited to attend the African Congress for Processed Foods in Casablanca, Morocco, June 23-28.

Some 250 Moroccan government officials and private sector representatives are expected to attend the Congress, which is sponsored jointly by Morocco's Office of Exports and Marketing (OCE) and the United Nations Industrial Development Organization. Businessmen and government officials from all African countries are invited.

The Congress will consist of a series of seminars and exhibits of food processing and packaging machinery. Seminar topics include, among others, long-range agro-industrial planning, rural development, cooperatives, cooperation between developed and developing countries, role of international organizations, and modern methods of food processing and packaging.

The participation fee is $100 per person. Inquiries should be addressed to Mustapha Alaoui-Fdili, Office d'Exportation et de Commercialisation, 45 Avenue de l'Armee Royale, Casablanca, Morocco.

Worldwide Business Outlook

Japan Faces Restraints, But Recession Seen Unlikely

For the first time since the postwar reconstruction period, Japan is confronted with widespread shortages of goods in the face of economic boom.

Economic policies necessary to squeeze inflationary forces will inevitably require some degree of deflation. However, the U.S. Embassy in Tokyo believes it is unlikely that Japan is on the verge of yet another typical recession. Inventories are low relative to sales and could well be built up, productive capacity is inadequate in many industries to meet current and prospective demand, aspirations for better housing remain unsatisfied, and desirable public works and welfare programs are being postponed.

Domestic demand remains strong despite government policies of restraint, and the economy has been operating at the limits of capacity since mid-year. Consumer spending, swelled by large increases in household income and rising aspirations, has accelerated. Business fixed investment has been spurred on by swelling orders, shortages of manufacturing facilities as well as labor, and increased costs of meeting more stringent anti-pollution standards. Demand for better housing has maintained a high rate of residential construction.

Growth in output has been unable to keep up with the rise in money demand. In fact, the pace of real GNP advance declined around mid-1973 due in part to temporary shortages of critical inputs like electricity, steel, plastics, etc., as well as to physical capacity limitations in several industrial sectors. By September, however, manufacturing production began to advance again.

This tight supply situation and strong internal demand created upward pressure on domestic prices. The rate of inflation as yet has shown no signs of slackening. By the third quarter the annual increase of the GNP implicit price deflater was 12.6 percent compared with only 4.4 percent a year earlier. For 1973 as a whole, nominal GNP was some 23 percent larger than in 1972. Advances in volume of output, on the other hand, were substantially smaller.

Situation at year-end

Despite these strong trends, there are some signs that progressive tightening of monetary policy since early last year, along with delays and postponements in public works projects, have created a more cautious attitude among businessmen.

Japan is very heavily dependent on petroleum imports for its total energy supplies, so that cutbacks in oil supplies will impose limitations on further growth of industrial production in the period immediately ahead. Japanese industry, which consumes over 70 percent of all petroleum, cannot be sheltered from the main impact of an oil shortage. An across-the-board reduction of energy consumption has been imposed on all large industrial users.

The prospect is for a decline in industrial production as long as Middle East supplies of crude oil are restricted. The Government recognizes that shortages of certain products could create serious bottleneck problems for other industries. It will try to alleviate this and ensure supplies of consumer necessities.

The outlook during the first part of 1974 is one of inadequate supplies in the face of strong demand. Even if normal flows of oil imports are resumed at an early date, the rate of real growth of the economy will be restrained by continuing shortages of labor and essential supplies and inadequate manufacturing capacity. Consequently, the increase in physical output is likely to fall short of the longer-term trend of 9-10 percent in the growth of capacity. The increase in real GNP may be only 5 percent in 1974, and could be even less if there is a prolonged oil crisis.

On the other hand, the growth of money wages and other income will be much less affected by the oil crisis. Therefore, nominal GNP may increase by 20 percent in 1974, only slightly less than the 23 percent rise last year. The rate of inflation will remain high but may begin to moderate slowly from the present rate.

An anti-inflation budget for the fiscal year beginning April 1 appears likely. Severe limitations on the rise in government expenditure would remove one of the factors that contributed to the present inflationary situation, and would create better balance between aggregate demand and available supplies.

Longer-term outlook

The longer-term outlook is for an economy operating close to the limits of its available capacity in order to satisfy public aspirations. However, it is now recognized that to deal with inflationary pressures over the longer term additional measures may be needed. Proposals that are being considered include greater competition among business and removal of various cartel arrangements, elimination of retail price maintenance, further incentives to promote savings, and an incomes policy. Japan may also recognize

BRINGING IRON ORE TO JAPAN—*The* San Juan Exporter *takes 80,000 tons of iron ore concentrates in slurry form to Hirohata Works of Nippon Steel Corp. as part of a $113 million, 10-year contract between Marcona Corp., San Francisco, and Nippon Steel.*

that in seeking price stability, competition can be fostered by encouraging larger domestic sales of foreign manufactured goods.

Prospects for exporting to Japan in 1974 remain very favorable. With strong demand and inadequate production there will be temporary shortages for a variety of industrial goods and materials. Japanese businessmen will look abroad, especially to the United States, to supplement domestic supplies. This should provide new opportunities to American businessmen for developing supplier relationships with Japan which could well extend beyond the current period of shortages.

Developments, trends

A series of recent developments and continued trends combine to increase significantly the potential for U.S. exports to Japan. Primary among these are rising wages and material costs in Japan and shortages of labor and industrial sites, coupled with the increased competitiveness of U.S. products resulting from the past currency realignments. Recent internal developments have intensified Japanese demand for labor-saving equipment and technology. Machinery and equipment represent 20 percent of imports from the United States.

U.S. firms should find excellent prospects in areas such as: computer hardware and software, numerical control machine tools, hydraulic process control equipment, advanced materials handling equipment, automatic assembly lines, automated warehouses, advanced food packaging and cold chain equipment.

Japan's changing labor conditions give addded impetus to a continuing trend away from labor-intensive industries and toward high-technology areas. Inasmuch as U.S. industry is particularly competitive where high technology is concerned, on both a technological and price basis, opportunities for U.S. exports are excellent in such fields as: data communications equipment, minicomputers, analytical and testing instruments, electronic components, metallic powder processing equipment, and vending machines.

Shortages of industrial raw materials are currently a serious concern to Japanese industry. In some cases they will offer new or improved export opportunities even over the longer term to U.S. firms able to meet these needs. Examples of short-supply items include: such petrochemical products as certain types of PVC and ABS, logs, and lumber, paper, certain electronic components, certain automotive parts, ferrous scrap, aluminum ingot, and caustic soda (high grade).

The current petroleum shortages will tend to exacerbate these supply problems and may well result in increased Japanese demand for both partially processed petrochemical materials and finished products incorporating these materials. Although many of the same items are in short supply in the United States as well, some of the above may offer export possibilities.

Japan's dependence on imported energy, although a problem of long standing, will attract increased attention in the future. U.S. export opportunities that could contribute to needed solutions in this area include: oil and gas pipeline equipment and related technology, liquefaction and deliquefaction equipment and technology, nuclear power generation equipment, and total energy systems.

Pollution continues to be a problem in Japan, with the Japanese Government taking positive steps toward environmental protection. In addition to requiring additional equipment, these anti-pollution measures have in some cases (e.g. the pulp and paper industry) resulted in drastic consolidations and shifts in product mix. Moreover, higher capital investments have hindered certain industries from increasing capacity fast enough. U.S. export opportunities abound in this area in general, and particularly in air and water pollution-monitoring and control equipment.

Another trend in Japan which bodes well for U.S. exports is the average Japanese citizen's quest for a "quality of life" that reflects more adequately the economic wealth of Japan. Included in this are consumer goods, infrastructure-related equipment and, of course, tourism.

Japanese demand for imported consumer goods is supported by a high and rising real income and a desire to more fully enjoy a growing amount of leisure time. These factors, combined with a desire for top quality, imported consumer goods, provide excellent possibilities for U.S. exports of a very wide range of products, such as household appliances, sporting and leisure-time equipment, automotive accessories, textiles and apparel, and smaller sporty U.S. automobiles. The number of Japanese outlets of U.S. retail establishments continues to swell, as does the interest in U.S. franchising.

Social welfare concern

A strong concern for social welfare is reflected in the relatively new emphasis accorded this sector by the Japanese Government. Translating this change in Japan's priorities into U.S. export opportunities, the following are considered particularly promising: computer-assisted educational aids, medical engineering equipment, sewage cleaning plants, incinerators and garbage collection and disposal systems.

The United States is an important and dependable supplier of a wide variety of agricultural commodities. In the six-month period ending September imports amounted to $1.4 billion, an increase of 125 percent in value over the same period in 1972. While prices were higher, volume was also up very substantially—41 percent—in part because of reduced supplies available in other markets.

Feedgrains, soybeans and meat have been in the forefront of this increase. Exports of U.S. agricultural products should continue at a high level in 1974.

New Zealand's Search For Energy May Require Equipment, Know-how

The New Zealand economy performed well in 1973 but the international oil crisis casts an increasingly ominous air of uncertainty over the future. There is growing concern over the danger of skyrocketing costs of oil for transport and industry and the possibility of a reduction in New Zealand's export earnings, coupled with shortages and increasing costs of essential imports. The U.S. Embassy in Wellington also points out, however, that the move to develop new energy facilities could expand opportunities for U.S. sales of equipment and technology.

During the latter part of 1973, when the oil crisis broke, there was a sudden strong interest in developing alternate sources for energy, running the gamut from adapters to convert automobiles to operate on LPG to starting plans for nuclear power plants. How much of this spurt of interest will continue will depend on how hard New Zealand is hit by the energy crisis.

In any case, the development of more hydroelectric and gas- or coal-powered plants for generating electricity is receiving priority attention by the government. This also means reopening idled coal mines and installation of labor-saving machinery for extracting, handling, hauling and storing coal. Many factories will be converting to coal, involving replacing or adapting existing equipment. There should be a growing market for a variety of equipment such as coal-burning industrial furnaces and stokers.

New Zealand has large natural gas reserves. The output of one on-shore gas field is being increased, and a treatment plant for removing other gases is being enlarged. The number of residential gas consumers in Wellington, Auckland and some other communities is growing. Factories are converting to gas. Demand should grow for appliances and other equipment operating on gas. Offshore, development of a very large field is under way. The gas will be used in new electricity generating

plants which will start operating in the 1970's and early 1980's.

New Zealand at present produces no petroleum. There are a number of onshore and offshore licensed areas which offer prospects for locating petroleum, and exploration work may pick up in 1974. This could open opportunities for supplying not only machinery and equipment, but also technological know-how.

Last year marked a period of particularly high business activity and growth in New Zealand. Export receipts rose 22.4 percent over 1972, and foreign exchange holdings remained high. New Zealand's pastoral products maintained their dominance as foreign exchange earners. Import payments continued to increase.

With foreign exchange reserves beginning to decline, fed by the increased costs of petroleum imports, some predictions indicate balance of payments problems by mid-1974, possibly leading to strain on the New Zealand dollar.

The high monetary liquidity of the first half of 1973 has disappeared and credit has become increasingly tight.

Inflation plagued New Zealand throughout 1973 and will likely continue well into 1974. Though industrial production and building activity rose throughout the second half of 1973, work stoppages lowered output and growth in certain sectors. There were signs at the end of 1973 of a lessening of business confidence because of the feeling that the government was susceptible to pressures of trade union and consumer groups in resolving industrial disputes and countering inflation.

With the prospect of increasing costs of and shortages in imported materials for New Zealand industry plus greater petroleum and shipping costs there will likely be some decrease in economic growth. There are insufficient facts yet available on the effects of these developments to make sound estimates of the extent or way in which they will affect the economy. One effect could be increased industrial rationalization. Industry could press for increased protection or subsidization. There is still a strong domestic demand for many products. If export opportunities for industry decline because of rising production and shipping costs, industry may concentrate more on serving this demand.

Principal income

But New Zealand's principal income is still derived from its pastoral industries. With the prospects of continued strong demand for meat during 1974, including lamb, it is likely the prices for these products will be maintained or drop at most only moderately. Production and export of beef should rise but sheepmeat, suffering from a drop in production in 1973, might remain low because of more bad weather this year.

IRON ORE PIPELINE AT SEA—*This buoy, anchored off New Zealand's North Island, serves as a transfer point for submarine pipeline from an iron sands mine ashore and as a mooring facility for large ore carriers operated by a U.S. firm based in San Francisco.*

Wool production and exports will likely drop some also. Export values may decline from present highs and returns to New Zealand will be less because of increased shipping costs. There is some speculation that the demand for wool may hold as synthetics' prices rise and production falls. Forest products, though suffering from production cutbacks because of labor disputes during 1973, will likely become an increasingly important export in 1974.

New Zealand's exports to the United States during 1973 increased nearly 10.4 percent over 1972. New Zealand's imports from the United States for the same period were up over the year earlier by more than 45 percent.

Second to United Kingdom

Only the United Kingdom (buying 30.5 percent, vs. 37.3 percent in 1972) leads the United States (14.8 percent vs. 13.8 percent in 1972) in purchases of New Zealand's products. New Zealand's principal export to the United States during 1973 was meat, representing 30 percent of New Zealand's total meat exports for the period.

In October, following July reductions of MFN and General Rates for Concessionary items of the Customs Tariff to the British Preference (BP) level, the Government published a new Customs Tariff—to be effective from July 1, 1974—which will lower some rates, eliminate the distinction between MFN and General Tariffs and progressively eliminate the BP's of the existing tariff over a four-year period. Though Australia, Canada, and some other Commonwealth countries will continue to benefit from preferential tariffs, the U.S. competitive position vis-a-vis the United Kingdom will strengthen considerably.

Building shortages

With building and factory construction at an all-time high, many shortages of building materials and machinery, factory and transport equipment have developed. Special import licenses are being issued for importation of a number of these items. This should continue well into 1974 so the prospects for continued U.S. exports to New Zealand of capital equipment (and some consumer items) during the first half of 1974 appear fairly good.

But, of course, this is contingent upon a continued acceptable level of investment. The tightening of liquidity and the adverse balance of payments could serve to reduce investment activity. Importers might find obtaining foreign exchange allocations and import licenses more difficult. Consumer items would likely be the first casualties of a program to reduce imports if there should be a decision to conserve foreign exchange reserves or a move to increase industry confidence.

New Zealand has an important forest products industry. With the high world demand for forest products such as plywood, fiber board, newsprint, etc., it has prospects of being a major foreign exchange earner for New Zealand. The great interest in expanding this industry will involve installation of considerable capital equipment.

East Africa Presents Mixed Trade, Investment Prospects

Prospects in East Africa, as seen by William D. Wolle, Commercial Attache at the U.S. Embassy in Nairobi, are mixed.

Kenya remains an attractive market for U.S. suppliers, and Tanzania holds interest in more restricted fields. Uganda on the other hand offers a poor outlook for U.S. sales.

As an economic unit and institution, the East African Community spent another year marking time in 1973. There was little growth in intra-Community relations among the three member countries and minimal cooperation in some respects with regard to the common transportation and communications services. Financially, the jointly-owned East African Airways Corporation has enjoyed better success in recent months, but East African Railways ended the year in a weakened financial state that has received wide publicity.

Last year, like 1972, was a good one for agriculture, and Community exports grew accordingly. Coffee shipments were unusually heavy from Kenya and Uganda, and sisal from Tanzania. Overall export growth was substantial; based on trade figures through October, Kenya registered a 37 percent increase over 1972 exports, Tanzania 8 percent and Uganda 19 percent.

Imports into Community countries showed a different pattern during 1973. In Kenya imports were held down during the first part of the year by government controls installed on account of 1971-72 balance of payments difficulties. But controls were relaxed in mid-year and imports through October were up 16 percent. Tanzania recorded a 14 percent increase in import trade through the same month. In Uganda, however, internal economic and commercial dislocations caused a 27 percent reduction of imports compared with 1972.

Divergent trade trends

As to U.S. trade with the Community, trends are sharply divergent. U.S. sales to Kenya in 1973 were up by 46 percent through October, whereas sales to Tanzania were down by a similar percentage and sales to Uganda dropped more than 50 percent.

Intra-Community trade has remained largely a matter of Kenyan trade with each of the other two States, which since their 1971 clashes have had almost no commercial relations. There is no sign this situation will change, nor any definite indications that the three national Presidents, who compose the East African Authority, will meet in the near future and breathe new life into the E.A.C. Despite this institutional problem, and regardless of the expected heavy financial impact of the energy crisis on all three countries, there will continue to be excellent opportunities for U.S. commercial sales in Kenya, and selective opportunities in Tanzania.

Port congestion, especially in Dar es Salaam, but to an increasing degree in Mombasa as well, is a trade disincentive that the Community and governments concerned are consciously seeking to alleviate. Increased handling of Zambian trade is one cause of the situation. Rising ocean freight rates pose another related problem.

Kenya: Kenya has achieved an admirable growth record over its first decade of independence, but as the eleventh year begins some leveling off is anticipated. The impact of costlier petroleum imports and poor 1973 rains will be felt in the months ahead and, combined with wage and price inflation, may take the bloom off the long economic boom in Kenya.

Nonetheless, import demand in many product lines should remain high and the good existing climate for investment will continue, with specific opportunities arising. Main imports from the United States in 1972-73 have been aircraft and aircraft engines and parts, construction and mining machinery, lubricating oils, insecticides, paper products and various types of machinery. Machinery and construction equipment import prospects still look good, and there should be a growing market for cereals and food products. However, the sharp drop in Kenya's official foreign exchange reserves in the last quarter of 1973 (down 26 percent to $208 million) plus skyrocketing crude oil prices may cause an early government tightening of trade controls.

The field of agribusiness holds special promise for U.S. investment. A massive beef processing expansion costing over $50 million is being planned with the help of several foreign donors. There will be equipment needs for this and for other projects in the agribusiness field. Kenya also plans to expand sugar production and processing.

A decline in tourism was experienced in 1973, attributed to rapidly rising hotel and related costs and to uncertainties of the international monetary and aircraft fuel situations. However, several new hotel ventures, some with partial government equity participation, are going forward in scattered locations around the country. The government is expected to continue its strong support of agricultural and tourist ventures in the new Five-Year Development Plan, due to be published soon.

An indication of the high degree of U.S. private sector confidence in Kenya's future development and investment prospects is the fact that several U.S. international banks have decided in the past year to establish branches or representative offices in Nairobi. Another focus of private attention has been oil exploration; in a spurt of interest that antedated this winter's worldwide energy crisis, some sixteen oil companies (several American) since 1971 have taken up exploration licenses from the government and are working in eastern regions of the country.

MODERN NAIROBI—*Kenyan import demand is expected to remain high despite possible moderation in the country's long economic boom. Above, Kenyatta National Hospital.*

Kenya Government policy has consistently been favorable to foreign investment. In future, it is likely to be particularly amenable to those projects aimed at building Kenya's exports and possessing a high labor component. Kenyanization of retail enterprises and of the economy generally has been conducted steadily but at reasonable speed, and this sensible approach has been a further encouragement to foreign investors and traders. These policies are an important complement to the country's general political stability and the capital's communications and climatic advantages; taken all-in-all, these factors continue to attract widespread U.S. and other business interest in Kenya.

Tanzania: This heavily agricultural country with a per capita income of barely $100 possesses only modest purchasing power. Its socialist orientation means that companies seeking sales outlets usually must deal with one or another state-owned trading organizations. About three-quarters of Tanzania's imports are handled or approved by one of six such organizations with unproven managerial effectiveness. Tight exchange controls are maintained.

Despite this, trade opportunities are present in selected fields. A prime example now is textile machinery, as the Tanzanian Government wants to double textile productive capacity by 1980. Other areas deserving U.S. export attention include rural electrification, building materials, agricultural implements and processing machinery and business machine systems. In another year, a new Five-Year Development Plan may be ready and may illuminate other promising fields.

The island of Zanzibar appears recently to have developed greater commercial attraction. With improved import policies and sizable independently-controlled reserves, it is becoming a better market for civil airport equipment, and communications and construction gear. Tourism infrastructure may become another area of interest.

The scope for foreign investment and for sale of straight consumer goods in Tanzania is very limited due to the nation's commitment to state ownership and the widespread presence of goods from low-cost Asian producing countries. There are, however, examples—such as one provided by a U.S. tire plant—of foreign industry investments that are succeeding because they are carefully attuned to national targets and/or because they are well-placed to take advantage of markets in neighboring countries as well as internal demand.

Of possible adverse impact in terms of government and parastatal organization efficiency as 1974 proceeds will be Tanzania's increasing preoccupation with the scheduled move of its national capital to centrally-located Dodoma.

Uganda: Outside confidence in the Ugandan economy is at a low ebb after three full years under its present government. Borne by its rich agricultural base and, so far, good internal transport, the economy has been ticking over from season to season, but hardly developing. Domestic and foreign investment prospects were severely damaged by the government's sudden late 1972 expulsion of non-citizen Asians which focused critical international attention on Uganda and drained off much of the country's management and business skills.

Last fall, a series of arbitrary actions and insults by the Ugandan Government caused the withdrawal of official U.S. personnel from our Kampala embassy. The year saw further reduction in imports from the United States, which already were barely limping along. U.S. purchases, consisting mainly of coffee, have so far held up well. But on a practical business level, difficulties in Uganda connected with getting foreign exchange allocations and making remittances abroad have been insurmountable in many cases and, combined with management and personnel disruptions caused by the Asian expulsion, have resulted in declines of 50 percent or more in imports from all Uganda's leading suppliers.

Many of the country's development projects have been shelved, an additional discouragement to foreign trade and investment.

The trend in overall industrial and commercial activity is still downward and there is no sign that the government, bureaucracy or new private entrepreneurs will reverse it soon.

Summing up, while Uganda as a rich agricultural nation remains a potentially interesting market in the long run, its political and economic situation seriously dampens the prospects for substantial trade or economic relations at this time.

The U.S. Agency for International Development has the following anticipated capital projects in East Africa in which U.S. equipment will be used:

Kenya: a) A $10 million program loan to finance private sector imports as a means of supporting Kenya's balance of payments and generating local currency to support the development budget — discussions to identify eligible transactions are still proceeding; b) A $10 million project loan to increase beef production through ranch development, meat processing and other rangeland improvements — studies to define the project are nearing the final stage.

Tanzania: a) A $2.6 million project loan to finance the earthmoving and construction equipment components of several projects in the agricultural sector; b) a $3 million grant project to construct and equip 18 maternal/child health training centers—18 packages of hospital equipment will be needed, and procurement is being coordinated with the General Services Administration.

Interested U.S. suppliers should contact U.S. AID in Washington for details.

TANZANIAN PORT—*Tanga, located in the northeastern part of the country on the Indian Ocean, handles an increasing volume of Tanzanian import and export trade.*

U.S. Firms' Listings Wanted For East African Directory

The publisher of the *East African Directory*, a comprehensive classified compilation of firms operating in East Africa, is soliciting listings of U.S. firms desiring to export to that area. The directory contains a section of exporters by country and the products they wish to sell, and lists agents and others wanting to do business with firms in East Africa.

Further information can be obtained from John Turner, East African Directories Co., P.O. Box 1237, Nairobi, Kenya.

Norway's General Economic Expansion Generates Wide-Ranging Opportunities

A general economic expansion now appears to be well under way in Norway, according to the U.S. Embassy in Oslo.

Production in manufacturing industries is growing at an increasing rate and the labor market has tightened. Order statistics for the third quarter of 1973 show an upsurge—particularly in domestic orders for investment goods—which promises continued expansion of industrial production. The impact of Norwegian involvement in the offshore oil and gas business has now reached a level where the government has found it necessary to make establishment of new oil bases (and larger new investments in general) dependent on government approval.

Power companies are ready

Uncertainties stemming from the impact of reduced supplies and higher prices of petroleum products cloud the outlook for the Norwegian economy. Norway is, however, even in the shortrun, among the countries likely to be least affected by petroleum shortages and price boosts, because 60 percent of the total energy requirement is met by hydroelectric power. The water reservoirs of power companies are, moreover, filled to an extent permitting sizable replacement of fossil fuels by hydroelectric power in industry as well as households.

If, however, fuel shortages result in production cutbacks among its major trading partners, demand for Norway's products may fall off, but just the opposite could happen if Norwegian industry turns out to be in a better position to keep up production than competitors abroad. Higher oil prices, however, are expected to hoist the rate of inflation in 1974 by one or two percent over the previously forecast 7.5 percent.

The Norwegian Government's posture regarding the energy situation appears mildly optimistic. Cutbacks in oil deliveries to industry have been limited to 10 percent—which reportedly has been offset by increased supplies of hydroelectric power.

The 1974 fiscal budget, which was approved by the Storting (parliament) on Dec. 17, has undergone no changes since its presentation in the early fall. Nor were any adjustments made in the accompanying National Budget, which envisages 5.5 percent real growth in 1974.

The government view also seems to be generally shared by industry. A poll taken by a leading Oslo daily at the end of December reveals no gloomy mood in industry and trade circles. Most companies questioned report rising turnover and profitability in 1973.

The growth of U.S. exports to Norway during the first eleven months of 1973 was fairly encouraging. Following a disappointing performance in 1972, Norwegian imports from the United States increased 25.9 percent over the January-November period the previous year. The expansion of imports from the United States is close to that of imports as a whole, thus maintaining our share of the Norwegian market at about 6 percent. The possibility of edging out Denmark as number four supplier country to Norway is slim, but we will give the Danes a close race.

In actual fact, U.S. exports to Norway are running considerably higher than indicated by Norwegian trade statistics, but just how much higher is unknown. Because equipment for the offshore oil industry is not brought through Customs, it is not reflected in official Norwegian statistics. It is conceivable that the actual level of imports from the United States may be close to double that shown in the official trade figures.

While Norway is a small country, its market potential is greater than might be suspected at first glance. For one thing, it is among the wealthiest countries in the world in terms of per capita GNP. Furthermore, there are at least three areas where sales potential is completely out of proportion to the country's 3.9 million population, lying in the multi-hundred-million to billion-plus dollar range. These are the "mega-markets": offshore oilfield equipment, maritime equipment, and environmental protection equipment.

OSLO SHOW—*At Nor-Shipping '73, Hydro Products, San Diego, displayed its 125-D1 Diver Inspection System. Chuck Strickland, general manager (second from right), informs visitors to the exhibit about his firm's underwater television viewing system.*

The 'mega-markets'

Offshore Oil Equipment: It is expected that concessions for drilling in 32 blocks in the Norwegian sector of the North Sea continental shelf will be awarded this spring, allowing a full summer season of exploratory drilling activity. In view of the current worldwide oil situation, there can be little doubt that this activity will be intense, creating a good market for "consumables" and other equipment, including, but not limited to, mud control, mud logging, testing and simulating equipment; weather, current, and other sensors; and sophisticated onboard electrical equipment such as alternators, switchboards, motor control centers, control consols, monitoring systems, S-C-R equipment, and AC and DC transformers.

In addition, work proceeds apace on development of the Phillips Group's Ekofisk field and associated pipelines, which represent another facet of the Norwegian offshore market. Further, Norwegian owners have now placed orders for 43 drilling rigs, and additional orders are expected. A number of these rigs will be built in U.S. yards, representing substantial U.S. sales for Norwegian account. Moreover, those built in Norwegian yards offer a significant market for onboard equipment of U.S. manufacture.

Finally, the government may open offshore areas lying north of 62° to exploratory drilling in 1975. While some seismic surveying work has already been done, this type of activity is expected to pick up considerably this year, offering opportunities for U.S. equipment and oceanographic technology.

Maritime Equipment: The current energy crisis has added a certain fillip to the already strong interest shown by Norwegian shipowners in VLCC's (Very Large Crude Carriers) and LNG carriers. Shipping and shipbuilding represent an enormous potential market for U.S. manufacturers of equipment and supplies. Included among those manufacturers may be some for whom the maritime industry could represent an entirely new market, for a ship is, in a sense, a floating city, and an LNG carrier requires linens and laundry equipment as well as cryogenic pumps and valves. Norwegian industry sources continue to express amazement that more U.S. firms have not awakened to the sales potential here. We have—in their estimation—barely begun to scratch the surface of the market.

Environmental Protection: The third "mega-market" in Norway is pollution control equipment. Because many of Norway's basic industries are heavy polluters, and because of widespread public concern about the quality of water and air, the market

potential in this sector is far greater than Norway's small population might indicate. In addition to an estimated investment requirement of $350 million for industry, the expenditure that will be required by the public sector in such fields as municipal waste disposal and water treatment is of significant proportions—the city of Oslo, for example, has just announced a $100 million sewage disposal project.

Smaller-scale opportunities

In addition to the three "mega-markets" there are a number of other areas offering excellent growth and incremental sales potential, but on a smaller scale—perhaps in the six to seven digit range. Among these, Embassy research has identified the following as being particularly promising:

Health Care Industries Equipment and Instrumentation (Biomedical) Equipment: The Norwegian market for biomedical equipment, while moderate in size, has the highest growth rate in Scandinavia and is expected to reach $25 million in 1976. The U.S. share of this market is currently about 10 percent, and is projected to rise to 13 percent or better by 1976.

Building and Construction Supplies and Equipment (Including Do-It-Yourself Supplies): While residential construction has recently stagnated, the average growth rate for the past several years has been 4-5 percent. There is great interest among contractors, suppliers, and architects in new U.S. product developments. High labor costs account for a rapid growth in do-it-yourself home repairs and remodeling, with a concomitant growth in the potential for quality handtools and do-it-yourself supplies (plastics, adhesives, etc.).

Graphic Arts Equipment: The Norwegian printing and graphic arts industry considers the United States to be the world leader in technological developments. Automation, computerized control, and other labor-saving techniques are of particular interest.

Other Industrial Equipment: Worldwide shortages of basic materials have caused Norway's primary metals industries to dust off expansion plans. A large oil refinery is currently under construction, and a petrochemicals industry of significant proportions, based on North Sea gas, will soon be launched, including at the first stage, an ethylene cracker and a polyethylene-polypropylene facility; synthetic proteins, ammonia, and urea facilities, representing perhaps $300 million in investments, are also under consideration.

Although the growth rate in the mining industry is expected to slow, what expansion plans exist—including a new coal mine at Svalbard—appear to offer interesting sales possibilities for technologically advanced drilling equipment; heavy intra-mine and long-haul transport equipment; instrumentation for the mining and minerals processing industries; coal-cutting equipment; and heavy front-loaders.

Economic Signals From Afghanistan Mixed, Unclear

The Afghan economy has suffered many shocks in the past year, reports the U.S. Embassy in Kabul.

The republican regime which came to power in July has not yet defined its economic and commercial policies, leaving the Afghan business community confused and uncertain. Dislocations in the money market and in import-export trade due to actions of the new regime caused a serious decline in the volume of trade for a time. Floods in Pakistan during the season for shipping fruit to India, and a report of Asian Hoof and Mouth Disease just before the major Karakul auction in London, caused receipts from these two major exports to be lower than anticipated.

Agriculture, however, had an excellent year. While it is doubtful that the same production will be achieved this year, Afghanistan has demonstrated a potential for becoming a net food-exporting country; the long-term agricultural outlook, given positive government policies, is good.

Trade is rising

The new government's temporary measures which caused commercial dislocations have now been withdrawn. Imports and exports are rising, and higher world prices for Afghanistan's exports make their prospects bright. Increased export earnings should at least partially offset the price rises in fertilizer and petroleum imports.

The new government's economic policy still has not been enunciated. President Daoud, in the only public statement of his regime's policies, has called for major reforms in the key policy areas of agriculture, foreign trade, money and banking, government revenue collection, transportation, education, labor and health care.

However, to date, no specific programs for accomplishing these reforms have been announced. More importantly, no overall economic philosophy has been enunciated indicating what specific role will be played by foreign investment and trade, private or official.

On the positive side, the new government has approved the fledgling Industrial Development Bank of Afghanistan, a project which was launched shortly before the change in regimes. Also, the Agricultural Development Bank, after a slow start, seems well-launched as a source of credit for the agricultural sector of the economy. Both of these institutions undoubtedly will play key roles in the future economic development of the country regardless of what economic philosophy and policy finally prevails.

There are also firm indications that the new government will seek a greater share of its foreign assistance through the United Nations and related agencies, such as the International Bank for Reconstruction and Development (IBRD). Thus, increasing amounts of financial and technical assistance may be channeled through these international agencies rather than via bilateral channels as has been the case in the past.

This shift to multilateral channels, coupled with a change in the development philosophy of the U.S. Agency for International Development as reflected in the AID budget for fiscal 1974, could mean that potential American investors should begin to look more to United Nations agencies for development contracts, construction projects and technical assistance schemes being planned for Afghanistan.

Private joint ventures between American and Afghan companies must await publication of the new government's amended Foreign Investment Law, which is expected imminently. After publication of the amended law and sufficient time to observe how it is to be implemented, much of the present uncertainty concerning the new government's attitude toward private foreign investment should be eliminated.

If the new law is reasonably forthcoming toward private joint ventures, there are good possibilities in the fields of light manufacturing, food and animal products processing, consumer services and tourism. All such ventures will require personal attention and visits from American investors. Personal contacts remain the *sine qua non* for doing business in Afghanistan.

Canada Extends Most Temporary Tariff Cuts

The Canadian Government has announced that most of the temporary one-year tariff cuts of Feb. 20, 1973 (see April 2 issue of *Commerce Today*, page 39) have been extended to June 30, 1974, more than four months beyond the scheduled expiration date of Feb. 20. Several hundred consumer items are affected by this action.

Items on which tariffs reverted to the former higher rates on Feb. 20 are as follows: canned apricots, peaches, pears, and mixed fruits; fresh asparagus, brussels sprouts, cucumbers, tomatoes, sweet cherries, and strawberries; citrus fruit juices; prepared mixtures of meat, fish, and vegetables; industrial press-on tires; and lighting ballasts.

Former tariff rates had already been restored on beef, veal, and cattle (Sept. 21), and on fresh pears (Jan. 9). Tariff reductions on sugar and related products will be continued until June 30, 1976.

Sudan Offers Current Opportunities As Well As Considerable Potential

The Sudanese Government continues to follow a pragmatic, non-ideological economic development policy, according to the U.S. Embassy in Khartoum.

Still working from the foundation of basic agricultural commodity production, the government has been able to improve its balance of payments picture, but still faces a serious foreign exchange shortage. It has been relatively successful, however, in obtaining outside foreign assistance and has taken notable steps to revitalize the private sector and encourage both foreign and domestic private investment.

In the long-run, Sudan has a potentially favorable position as a supplier of basic food commodities. In the short-run, however, the problems are manifold and involve difficult trade-offs in economic and political terms. Increased capital and expenditures are accompanied by unacceptable rates of inflation, shortages in consumer goods, and an increased debt burden. Moreover, other factors are often working against finding solutions, not only internally where political considerations often clash with and contribute to already serious economic problems, but also externally where international conditions are anything but stable and bring unforeseen pressures to bear on the Sudan.

Nevertheless the Sudanese Government successfully weathered some rocky political moments during the past year with its short-term position as a result, if anything, stronger. It is therefore perhaps in a better position to face the economic hurdles. Moreover with constructive efforts under way in such key areas as the road from Khartoum to Port Sudan, improvement of the railroad and agricultural expansion in the form of the Rahad scheme, there is a promise of improvement in the future.

The climate for United States trade and investment in the Sudan is favorable. The Sudanese Government clearly recognizes the need for foreign capital and technology and indeed this was a major ingredient in its decision in July 1972 to resume diplomatic relations with the United States. The previous period of self-imposed denial and the resulting pent up attraction for U.S. capital, technology and products has moreover put U.S. firms, at least in the short-run, in a very favorable position.

Starting with this positive foundation, U.S. firms have made substantial progress in penetrating Sudanese markets with a trend of rising U.S. exports to the Sudan continuing as sales reached $24 million for the first three quarters of 1973. Successful exporters have generally been prepared to give the Sudanese market—be it private or public sector—close personal attention. In this way, not only have they matched the efforts of the Sudan's more traditional suppliers from Western Europe, but they have shown a willingness to work with the country as it explores unfamiliar territory in its development effort. The result can be a sale without need for competitive tenders and with usual bureaucratic problems much reduced.

Equally important, however, is the ability to offer some form of credit facilities. The Export-Import Bank is again extending facilities to the Sudan and U.S. private banks are also expressing considerable interest. Thus U.S. firms have found credit facilities somewhat easier to obtain. Until such time as the Sudan's fiscal situation improves, however, credit will remain tight and export-oriented projects will probably find greater favor with prospective financiers.

Although private sector activity is increasing—the textile industry being a notable example—the government and its semi-autonomous agencies remain both the main customer for U.S. exports as well as a potential partner in joint ventures. This poses no particular difficulties, however, in that many of the government concerns operate in a fashion indistinguishable from their private sector colleagues. Moreover, when dealing with the bureaucracy itself, the political motivation to get things moving—to implement any project on the priority list as conditions permit — presents U.S. firms whose interests mesh sufficiently with those of the government with unique opportunities for rapid market penetration.

Incentives, not restrictions

The provisions of the Sudan's liberal 1972 Investment Law favor the investor. They are generally cast in terms of incentives rather than restrictions. Examples include accelerated depreciation, five-year tax reductions, protective tariffs, customs exemptions, facilitated land acquisition, favorable electrical and freight rates and full remittance of profits and capital. Moreover, to date the government seems intent on giving practical application to the Law. U.S. firms submitting investment proposals have found that, while the bureaucratic response is sometimes slow, in the end approved projects receive almost all the requested concessions.

Not only does the new Investment Law provide explicitly for rapid compensation in case of nationalization, but the experience of the past serves as a degree of insurance for the future. The Sudan is unusual among developing countries in having first committed itself strongly to nationalization of private investment (foreign and domestic) and then having sharply reversed itself once this experiment proved disastrous in practice. Thus while the period of nationalization can be considered a negative factor in evaluating the current investment climate, in many respects the lessons learned and the current pragmatic approach constitute a positive element.

Among the relatively unique advantages for the prospective investor in the Sudan are: (a) a surplus of land available within easy commuting distance of the major urban center of Khartoum; (b) wide use of English as a commercial language; (c) a work force which although often illiterate is generally well motivated and loyal, and (d) flexibility concerning local equity participation.

The government is also prepared to accept capital intensive and advanced technology investment since labor, although not critically short, is also neither freely abundant. Balanced against these advantages one must consider fiscal problems facing the government—particularly the shortage of foreign exchange, and domestic inflation —and the major transportation bottleneck which even current efforts are unlikely to ease at least for several years.

The following products or fields seem particularly promising for U.S. trade and/or investment: agricultural equipment, particularly land preparation and harvesting; agricultural production and processing, both equipment sales and investment; livestock development, cattle and sheep — ranching and processing; earthmoving and other construction equipment; textile manufacturing, primarily equipment but investment possible; sugar production, both mill and plantation equipment; transportation equipment, vehicles, railroad locomotives and wagons, various river craft; aircraft, particularly light aircraft for agricultural pest control; also possibly commercial aircraft suitable for internal flights; communications equipment; pharmaceuticals; insecticides; consulting services, but only when financed by World Bank or bilateral sources; and construction contracts, on World Bank and even some bilateral projects.

Specific U.S. firms have shown that these opportunities can be exploited. Among those who have recently initiated or expanded sales or investment contacts with the Sudan are: Union Carbide (battery plant), Sterling Drug International (pharmaceutical production), Boeing Aircraft (707 aircraft sales), Northrop Page Communications (construction of an earth satellite station), AMATEX (sale of turnkey cotton spinning mill), Ford Motors (truck sales) and Louis Berger (consulting contracts with World Bank and U.S. AID).

In sum, the Sudan is a growing market and one with considerable future potential. Real problems exist, but for American firms whose interests coincide with the needs of the Sudan, early entry—be it in the form of trade or investment—promises the best opportunities for tapping and contributing to this potential.

Tunisia Offers Energetic Businessmen A Bright Economic, Political Climate

The Tunisian economy showed continued strength in 1973 and the U.S. Embassy in Tunis' forecast for 1974 is bright.

Last year overall agricultural production fell and tourism was stagnant but industry and services expanded. This year industrial and agricultural production should increase and world prices for Tunisian phosphates, olive oil, petroleum, lead and zinc have jumped more than enough to make up for a likely continued slow growth of tourism.

The balance of payments continued to show an overall surplus in 1973 and foreign exchange reserves increased. In 1974, for the first time, the value of exports will probably be greater than the value of Tunisia's imports. In addition, Tunisia will likely receive increased aid from Arab petroleum producing countries as well as continuing assistance from traditional donors. The rate of increase in domestic prices appeared to be below the world average in 1973 but inflationary pressures will probably be stronger in 1974.

U.S. exports to Tunisia for the first nine months of 1973 fell to $36.7 million compared with $49.8 million for the same period in 1972, primarily because of a fall in deliveries related to U.S. aid programs. Exports in early 1974 are increasing because of deliveries associated with an AID sector loan and a Title I PL-480 agreement for soybean oil.

U.S. exports on a commercial basis, however, will clearly have to continue recent increases if the United States is to maintain its past position in Tunisia's foreign trade. The healthy state of the Tunisian economy provides sound opportunities for such an increase.

U.S. business will have an uphill battle to overcome the traditional preference of Tunisians for doing business with Europe, especially France. In addition to geographical proximity, there are business, cultural and linguistic ties. Tunisia is also an associate member of the EEC, and consequently certain European goods enjoy tariff preferences.

Nonetheless, the preference is often small and with the devaluation of the dollar, the promising Tunisian balance of payments position, and the import liberalization policy followed by the Tunisian Government, many opportunities remain for the hustling U.S. businessman. U.S. products have a good reputation in this market, while political relations between the United States and Tunisia continue to be close and cordial.

Quality products at reasonable prices should find a good market in Tunisia. Aside from sales of agricultural commodities, the United States should continue to do well in office machinery, computers, big earth-moving equipment, petroleum exploration equipment, oilfield supplies and services, some kinds of agricultural machinery, paper products, and air-conditioning equipment.

Medical and scientific equipment is another area where the United States enjoys a good reputation and is competitive. The Department of Commerce is organizing a trade mission to North Africa in May covering hospital/medical equipment.

Expanding prosperity and import liberalization may create opportunities for sales of U.S. consumer goods which until now have been limited. A possible import quota for garments in 1974 may open up to good quality clothing what has been largely a protected market.

Major projects

Among major projects under consideration which could lead to exports of U.S. equipment and services is a major modernization of phosphate mines, possibly financed by IBRD. Recent increases of minerals prices should assure economic feasibility of such projects as well as expansion of lead and zinc output. Large heavy-duty trucks, cranes, diggers, and underground mining equipment of all kinds should be needed.

Plants to expand the chemical industry—notably processing of phosphates, fluorspar and other minerals—are to be built, while the new petroleum refinery in Gabes and the gas pipeline from Algeria to Italy should present important opportunities.

Industrial sewing machines and other equipment will be needed for the textile industry which has been expanding at a rapid rate (23 percent in 1973); this industry will continue to be dynamic, especially in the export sector as a result of the law favoring export industries, which is discussed below.

IBRD is financing the purchase of over 200 new busses in early 1974 for improvement of urban transit.

Two new cement plants of one million tons each are planned for the east and south of Tunisia. One is a joint effort with Algeria and the other is to be partially financed by Libya. Some machinery sales may be possible.

U.S. businesses will find that sales on the Tunisian market are considerably enhanced if the company has local representation. Business correspondence, advertising and technical literature and catalogues should be in French, if at all possible—especially business letters.

The investment climate in Tunisia is excellent. The Government welcomes and is actively promoting U.S. and other foreign investment. Advantages include closeness to the big European market, a relatively low wage scale and considerable fiscal incentives.

In 1972 a law was passed which offers exemption from income, production and other taxes, freedom to import required goods, assistance in finding land and obtaining necessary services and other incentives for companies locating in Tunisia to produce for export. Producers will enjoy duty-free privileges in the European market for manufactured goods with at least an average 50 percent value-added in Tunisia.

The tourism industry, although temporarily stagnant, has already attracted some

TUNISIAN STUDENT—*A young student operates a protractor in a classroom at the College Moyen et Secondaire at Medjez-el-Bab, an important Tunisian agricultural center.*

U.S. investment and other opportunities are available. The Government gives high priority to development of tourism and is developing infrastructure.

Investment for local production is promoted by the government and import substitution offers many possibilities. Protection of local production is offered as well as special incentives for exporting part of the production. There are also investment possibilities in services.

Some U.S. companies have already shown interest in the promising mining and chemical industries, especially in phosphate-related areas. The Government encourages agreements whereby private or public Tunisian companies perform subassembly work for foreign firms, and some European firms have already entered into such subcontracts.

The Tunisian Government seems receptive to management and marketing contracts which would assure the success of agricultural ventures.

Potential investment areas include livestock raising and feeding, and growing of fruits and vegetables to meet special or off-season needs. Food processing could also prove of interest to U.S. investors.

EEC Renews Duty Suspensions On Aircraft And Engines

The European Economic Community (EEC) has renewed for an additional year the suspensions of the Common External Tariff on aircraft and aircraft engines for the six original member countries. Separate transitional arrangements apply to the tariffs of the new EEC members, the United Kingdom, Denmark and Ireland.

Effective for one year starting Jan. 1, 1974, the Community's duty suspensions reflect continued strong Western European demand for U.S. aircraft, particularly wide-bodied jet passenger transports. The United States in 1973 exported nearly $1 billion in aircraft and aircraft engines to the EEC as compared with $598 million in 1972. At the same time, U.S. imports of these products from the Community increased from $208 million in 1972 to $338 million in 1973.

The following list shows the Common External Tariff, according to the Brussels Tariff Nomenclature (BTN), and a short description of the major items subject to total duty suspensions through Dec. 31, 1974. Ex 88.02BIIc, aircraft of an unladen weight exceeding 15,000 kg.; 84.06A/84.08A & BI, aircraft engines for use in aircraft imported duty free or built within the Community; 84.06DI/84.08DI, aircraft engine parts for aircraft imported duty free or built within the Community.

For further duty information, contact the European Regional Affairs and Trade Regulations Staff, Office of International Marketing, U.S. Department of Commerce, Washington, D.C. 20230, tel. 202-967-2337.

Hungary Cooperatives Seeking Ventures With U.S. Companies

Hungary's factories owned by members of cooperatives, an important segment of the economy not under Government ownership, are showing increased interest in joint ventures with Western firms.

Not large enough to engage in foreign trade independently of the Government foreign trade organizations, these cooperatives are nonetheless accessible as end users to the potential foreign trade partner.

Kinds of transactions usually of interest are the purchase of licenses and know-how, and in some instances the sale of these. Co-production and contract production are also of interest.

Prospects may be good for U.S. firms in this area of the Hungarian economy for several reasons. Since the managements are nominally accountable to co-op members, they may approach business in a way more familiar to Western corporations. Furthermore, the best cooperatives sell a high percentage of their goods abroad, implying that they are competitive in international markets and familiar with the dictates of reciprocal advantage.

Further inquiries should be directed to OKISZ (National Alliance of Industrial Cooperative), 1052 Budapest V., Pesti Barnabas u.6. Companies with little previous trade experience with Hungary are encouraged to keep Commerce Department's Bureau of East-West Trade posted on developments. Contact Alan Lewis, Trade Development Assistance Division, Bureau of East-West Trade, U.S. Department of Commerce, Washington, D.C. 20230 (Phone 202-967-3969).

Cooperation possibilities

Cooperation possibilities exist in the following industrial fields: (A more detailed listing is available from Lewis at the number given above)

General electric measuring instruments—Valve voltmeters, oscilloscopes, distortion meters, minimum distortion low-frequency generators, transmission engineering instruments, automatic units, control elements, frequently modulated district VT systems, level switches and intervention elements for telegraph system control, digital-analog converters, implementation units, transformers, batteries and chargers, electric units and assemblies for motor vehicles.

Precision instruments—TV repair, laboratory, and operational instruments, videotape recorders and camera selectors, watchmaking and repair instruments, silver and goldsmithing equipment, manometers, vacuumeters, thermometers, luxmeters, hydrometers, automatic thermostats, bio-electric instruments, textile industry production instruments and machinery.

Industrial machinery—industrial cleaning and maintenance equipment, small agricultural machinery and parts, commercial catering equipment, automotive repair and test equipment, small construction industry items, welders, plastic packaging equipment, laundry equipment, industrial diamond grinding.

Appliances—household and public utility electric appliances, metal furniture, seals and filters, office machinery, rubber products.

General steel processing—cold forming, special vehicle body production, locksmithing, air conditioning equipment, heat exchangers, cooling capacitors and evaporators.

Chemicals—Cleansers, cosmetics, protectives, additives and other industrial chemicals, plastics.

Apparel — Men's, ladies' and children's clothing, sportswear, knits, shoes and leather accessories.

Furniture—Items in modern or antique styles, toys, boats and other wooden products.

France Floats Franc, Tightens Controls

A six-month float of the French franc against the other major currencies was announced on Jan. 19 by the French Government.

In addition, French exchange controls have been tightened. The *Journal Officiel* of Jan. 20 carries the following measures: prohibition on franc loans to nonresidents; limitation of 180 days on maturity of export credits that may be extended without special authorization; and modification of provisions on forward cover as follows:

Forward sales of foreign exchange may be made freely, whereas previously they were subject to administrative formalities designed to ensure that they were based on bona fide commercial transactions and not simply means of speculating on possible appreciation of the franc.

Forward purchases of commodities, as a rule, are limited to a maximum of three months, whereas previous regulations set no time limits. For two lists of specific commodities, forward purchases of six and 12 months, respectively, are authorized. The six-month list includes livestock, meat and other food products, and certain industrial raw materials and semi-finished products. The 12-month list includes oil seed and cake, natural rubber, sheepskin, raw silk, raw wool, raw cotton and jute.

Limitations on borrowing abroad are eased so that a resident borrower may have outstanding foreign exchange borrowings equal to the counter value of 10 million francs, compared to the previous ceiling of 2 million francs.

International Business Reports

Exporters Encyclopedia—World Marketing Guide. 69th edition. Published by Dun & Bradstreet. 1486pp. $105 per year (subscribers receive twice monthly newsletters and undating supplements).

Recent editions of this publication represent considerable departures from earlier years when the accent was chiefly on export documentation. This latest edition incorporates additional new material to provide exporters with wider coverage of world marketing, import requirements, documentation, trade practices, transportation and communications. Included are individual entries on more than 220 world markets; East Germany is listed for the first time and the entry for the People's Republic of China has been expanded.

Write: Exporters Encyclopedia, P.O. Box 3224, Church St., Station, New York, N.Y. 10008.

European Development Policies: The United Kingdom, Sweden, France, EEC and Multilateral Organizations. Edited by Bruce Dinwiddy. Published by Praeger in association with the Overseas Development Institute. 118pp. $10.

This sixth annual review of European aid programs evaluates the record of the United Kingdom and examines French and Swedish aid performance. Analyzes the role of multinational organizations and discusses prospects of developing countries for expanding agricultural exports to the enlarged EEC and how income distribution and employment can benefit from agricultural development.

Write: Praeger Publishers, 111 Fourth Ave., New York, N.Y. 10003.

Establishing a Manufacturing Plant in Europe. 373pp. $28.

Aims at providing factual knowledge on investment and plant location in 21 European countries, this is a guide to the workings of investment incentives offered by the various European governments through their ministries for economic development and agencies concerned with economic growth.

Whenever adequate firsthand information was available and could be considered relevant and applicable to the conditions prevailing in a particular country, the following topics were covered: recent industrial development, forms of business organization, taxation, investment incentives, type and availability of labor, training facilities available, regional development, exchange control regulations, remittance of profits, repatriation of capital, cost factors, available and potential energy sources, raw materials, transportation, communications, and agencies concerned with economic growth.

Write: Noyes Data Corp. Noyes Bldg., Park Ridge, New Jersey 07656.

Pan Am Marketing Guide to Germany. Published by Worldwide Marketing Services, Pan American World Airways. Free.

This booklet includes a listing of 578 sites in Germany with the closest airport of destination. Other marketing tips include the areas of responsibility for the various U.S. Consulates in Germany, a list of German holidays, and various ways to save time and money on transportation costs.

A recent similar Pan Am publication was Marketing Guide to the United Kingdom. Pan Am's bimonthly publication Worldwide Marketing Horizons, free to U.S. firms, has been carrying a series on how to initiate trade in the major industrial nations.

Write: George K. Fields, Director, Worldwide Marketing Services, Pan American World Airways, 200 Park Ave., New York, N.Y. 10017.

Brazilian Business. Monthly magazine published by the American Chamber of Commerce in Brazil. $30 per year.

Describes trade opportunities and business and legal developments in South America's booming industrial giant.

Write: The Latin American Service, 327 Colorado Bldg., Washington, D.C. 20005.

Directory of U.S. Firms and Organizations in Indonesia. Published by the U.S. Embassy in Jakarta. 70pp.

The first of the three principal sections in this directory is a classified listing of U.S. firms and organizations. The second is an alphabetical listing of firms and organizations that includes a description of the major activities of each entity, lists principal officers and home addresses, and gives regional and U.S. addresses of the organization. The last section is an alphabetical listing of key personnel in each organization.

Write: Economic-Commercial Section, American Embassy, Medan Merdeka Selatan 5, Jakarta, Indonesia.

Flows of Resources to Developing Countries. Published by the Organization for Economic Cooperation and Development. 447pp. $8.

This reference work gives information on the development assistance programs of each of the members of the Development Assistance Committee (DAC)—the United States, Canada, Japan and Australia as well as most of the countries of Western Europe. Gives data for each country on the volume of resources made available to developing countries since 1961, the administration of aid programs, methods of financing, composition of the programs, financial terms, and geographic as well as sectoral distribution. Also contains information on flows of private resources to developing countries, either flows at market terms or grants by voluntary agencies. An annex deals with aid provided by non-DAC countries, among them the USSR, China and oil-producing Arab countries.

Write: OECD Publications Center, Suite 1207, 1750 Penn. Ave., NW., Washington, D.C. 20006.

Calendar For World Traders

March 6 — Memphis — Conference on "Inland Waterways: Their Influence on Exporting and Reverse Investment," Travelodge (Airport). Sponsors: Memphis District Office, Memphis State University and University of Tennessee.

March 6-7 — Marshalltown and Waterloo, Iowa — Export Marketing Workshops, Thunderbird Restaurant in Marshalltown, Ramada Inn in Waterloo. Sponsors: Iowa Development Commission, Iowa Regional Export Expansion Council, Small Business Administration.

March 11-13 — Tuscaloosa, Ala. — "Modern Colombia—The Challenge of Regional Diversity". Sponsors: Office of International Programs, University of Alabama; Birmingham District Office.

March 12 — Louisville—Kentuckiana World Commerce Council meeting, Holiday Inn, Brownsboro East.

March 13 — New York — FCIB Publishers Export Credit Group luncheon meeting, Advertising Club.

March 13 — New York — Panel discussion on Trade Reform Act of 1974. International Executives Assn. Summit Hotel.

March 19 — Memphis — Memphis World Trade Club meeting, Southwestern University. Program by Memphis District Office on Energy Conservation.

March 19-20 — Washington, D.C. — Conference on Corporate Stake in Meeting the Crisis in the Atlantic Alliance. At U.S. Department of State and Johns Hopkins School of Advanced International Studies. Sponsors: Atlantic Council, School of Advanced International Studies, International Management and Development Institute. Call: Dale Newsom, 202-785-6800.

March 19, 26, April 2, 9 — New York — International Development: The Role of Multinational Corporations, Engineers' Club. Sponsor: International Study and Research Institute.

April 22-23 — New York — Briefing session on Mexico: The Key Word is Growth, Plaza Hotel. Sponsor: American Management Association.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies and appoint agents, details on major construction and expansion projects, and notices of U.S. visits by foreign buyers.

U.S. Promotions Overseas

Materials Handling and Construction Equipment Catalog Exhibition. Casablanca. April 8-13. Morocco's new economic plan, 1973-77, has an impressive target of $7 billion for investments, much of which will be channeled into industrial, airport, and seaport expansion and public building and private housing construction. The United States is already Morocco's second most important source of imports and the outlook for growth of this very promising market is favorable. Call Robert E. Peterson, 202-967-3973.

Stanki (formerly Mashtroy)—U.S. Machine Tool and Machine Building Equipment Solo Exhibition, Moscow. April 10-19. The USSR continues expanding many branches of industry, especially production of automotive vehicles. This expansion necessitates a corresponding increase in demand for machine tools. The current five-year plan calls for investments totaling over $31 billion for machine building equipment. Call Oleg Jerschkowsky, 202-967-3376.

Aviation Ground Support Trade Mission to USSR, Czechoslovakia and Hungary. April 20-May 4. Each of these nations is planning to increase expenditures where air traffic control is concerned because of vastly increased airport traffic. Call Larry Cozart, 212-967-3741.

Environmental Control Equipment (JEEP). Buenos Aires Trade Center. April 22-26. Emphasized will be specialized environmental measuring, testing and control instruments and apparatus, and other related scientific, laboratory, and industrial instruments. Suppliers of other equipment for environmental control operations are also invited to exhibit. Call George Pollard, 202-967-5010.

Audio-Visual Equipment (JEEP). Mexico City Trade Center. April 22-26. U.S. audiovisual techniques are greatly admired in Mexico as the best available anywhere. If getting into a position to profit from continuing sales in this growth market is your objective, this first such promotion by the U.S. Trade Center in Mexico City is the ideal opportunity. Call Porter Clary, 202-967-5040.

Analytical and Process Analysis Instrumentation Technical Sales Seminar in Brazil and Colombia. April 22-May 3. Brazilian and Colombian markets for instrumentation are growing rapidly, owing to a rise in overall production and quality control requirements. Both nations are entering a phase of economic development/industrial expansion where the need for more sophisticated instruments is real. An additional incentive for the entry of U.S. suppliers into these markets is the almost complete lack of local production of this type of equipment and instrumentation. Call Wyn Coates, 202-967-5826.

Oil and Gasfield Machinery & Equipment (JEEP). U.S. East-West Trade Center, Vienna. May 2-4. Equipment of all kinds for petroleum exploration, drilling, and extraction is in short supply in Eastern Europe; quite often what is produced domestically is obsolete or unreliable. In many cases badly needed equipment is not produced within Eastern Europe and must be imported. Reflecting the high priority the petroleum industry has in the five-year plans of Eastern Europe, imports of equipment for this industry have almost tripled in recent years. This promotion will help you get in contact with the vital East-West traders who have had long experience in representing your types of equipment in the East. Call George Black, 214-749-1517.

Catalog Exhibit of Light Metalworking and Woodworking Equipment and Building Products, Beirut. May 2-5. Rapidly growing metalworking and woodworking industries in Lebanon, which account for over 16 percent of GDP, have taken on increasing economic importance. Building products are also in great demand in Lebanon's generally expanding economy. U.S. suppliers have the added benefit of dealing in a private enterprise atmosphere, where they are price competitive. Call Robert E. Peterson, 202-967-3973.

Harbor & Dockside Equipment (JEEP). Singapore Trade Center. May 8-10. Singapore is the fourth largest port in the world in terms of tonnage handled. Ten ships enter or leave the port every 15 minutes. As a natural corollary, Singapore is striving to become a major center of shipbuilding and repair. This exhibition is limited to new-to-market U.S. participants and is designed to put them in contact with potential representatives that can handle sales on a continuing basis. Call your nearest U.S. Department of Commerce District Office or George Dolan, 415-556-5866.

Trade Mission, Communications Equipment and Services, to Saudi Arabia, Kuwait, Bahrain and Qatar. May 10-23. Each of these Arab nations has a growing need for new types of communications equipment and sophisticated know-how in its installation and operation. Opportunities lie particularly in the area of telephone development, but encompass airport development (or air traffic control), TV and radio broadcast equipment, and modernization of armed forces communications systems. Call Larry Cozart, 202-967-3741.

Food Industries Equipment. Mexico City Trade Center, May 13-17. A growing population and a more affluent consumer have raised demand for processed foods to unprecedented levels and created a record market for modern equipment for the food industry. Standards for processed foods established by the Mexican Government have intensified interest in the latest U.S. equipment, regarded in Mexico as the best anywhere. Call Porter Clary, 202-967-5040.

Pulp and Papermaking Equipment. Stockholm Trade Center. May 13-17. Pulp and paper processing are cornerstones of the Swedish and Finnish economies, and are also important industries in neighboring Norway and Denmark. There are some 300 pulp and paper plants in the Nordic area, seeking technology which will make them competitive. Sweden alone will have invested $180 million in this industry by the end of 1973. This exhibition will feature pulp and papermaking equipment, including components; industrial process controls; computer systems; pollution control devices; and materials handling equipment. Call William Beiring, 202-967-3276.

Process Control Instrumentation Exhibition. Buenos Aires Trade Center. May 13-17. Argentine imports of process control instruments grew from $8.1 million in 1969 to approximately $15 million in 1972. Major expansion projects, other modernization developments and replacement needs are expected to generate a very active demand for imports of process control instruments into Argentina in 1974. The United States is the leading supplier of process control instruments, with 50 percent of the import market. Call George Pollard, 202-967-5010.

Data and Telecommunications Equipment. Milan Trade Center. May 14-18. Demand for computers and computer-related equipment in Italy will triple over the next five years, with U.S. equipment and services expected to dominate the near $300 million market. In addition, the Italian Government is planning to spend about $3.5 billion in the telecommunications sector over the next three years. Research indicates that virtually every large Italian government and industry organization is planning projects for data transmission between headquarters and branches. The Italian economy is expected to grow by 5 percent this year. Call John Priamou, 202-967-4377.

Interschul—Educational Materials Catalog Show at Dortmond, Germany. May 18-25. The educational budget for West Germany is expected to approach 6 percent of GNP by 1975, as $16 billion worth of systems and equipment will be required to accommodate increased student enrollment. This Catalog Show will be held as part of a major international fair which will provide increased exposure and sales opportunities for U.S. suppliers. Call Robert E. Peterson, 202-967-3973.

Instruments, Controls and Analytical Equipment for Industry and Science. Taipei Trade Center. May 20-24. Taiwan is a significant importer of process instruments and controls. Imports and consumption of these products are at record levels with excellent immediate and long-range sales

prospects. U.S. exports of these products jumped from $3.7 million in 1968 to $7.4 million in 1972. Equipment for a full-range of on-steam industrial operations, quality control, research and development, and scientific applications will be displayed. Call Harold A. Ogburn, 202-967-2413.

Hospital and Medical Equipment Catalog Show at Lagos. May 20-24. The hospital and medical services field in Nigeria is rapidly expanding and should continue this growth through 1980, especially in view of the recently approved "Third Development Plan." A Commerce-sponsored Hospital-Medical Trade Mission to this country in 1973 was extremely successful in generating immediate sales of U.S.-source products, due to their price competitiveness and continued good quality. Nigeria's strong economy, substantial foreign exchange reserves, and favorable commercial climate make this one of the most attractive markets in Africa. Call Robert E. Peterson, 202-967-3973.

Metal Surface Finishing and Treatment Equipment. Tokyo Trade Center. May 20-25. In 1972 the Japanese market for metal surface finishing and treatment equipment and accessories amounted to $975 million. This market is expected to increase by 30 percent during 1973 and 10 percent annually for the next three years. U.S. products which are unique, technologically advanced, labor-saving, or non-polluting have considerable sales prospects in the dynamic Japanese metalworking industries. Call Bill Dawson, 202-967-4056.

Petroleum Equipment and Process Control Instrumentation, Catalog Exhibit, Amsterdam. May 28-June 2. This exhibit, part of PETROTECH-74 (International Exhibition & Congress for Petroleum Technology), will include catalogs from U.S. firms manufacturing machinery and equipment for the petroleum industry—including pollution control equipment. The demand for U.S. equipment is great, as it incorporates the very latest in technology, and the exhibit offers an excellent opportunity for exposure. Call Robert E. Peterson, 202-967-3973.

Health-74, International Exhibition for Health Systems. Moscow. May 28-June 10. The Soviet Union is undertaking a vast program of expanding and improving its health system. Current domestic supplies have not been able to meet the demand for medical instrumentation and laboratory equipment. To overcome these deficiencies, the USSR has had to turn to imports to compensate for the gap between production and consumption as domestic supplies have been able to supply only 72 percent of demand. Call Oleg Jerschkowsky, 202-967-3376.

Textile Machinery and Equipment Trade Mission to Brazil, Venezuela and Colombia. June 1-14. Increasing emphasis on modernization and expansion of plant facilities make these three countries excellent markets for U.S. source equipment, material and know-how. Brazil, especially, is refurbishing plant facilities in order to increase export capabilities within Latin America. Call Herb Socks, 202-967-3846.

Numerical Control Machine Tools and Related Equipment Exhibition (JEEP). Buenos Aires Trade Center. June 3-7. Argentine manufacturers have become increasingly aware of numerical control machine tools as a means of improving the quality and exportability of their products. There is no local production of numerical control machine tools. Manufacturers of components and equipment essential for the servicing of these machines are also invited. Call Vicky Eicher, 202-967-4580.

Posidonia Fair—Business Automation and Materials Handling Equipment for Shipping Industry: Ship Building and Repairing Material. Catalog Exhibit. Athens. June 3-9. Shipping is one of Greece's major industries and since 1967 has been undergoing continued expansion. Today, tonnage of the Greek merchant fleet is approximately 40 million tons and the number of vessels over 4,300. Funding, insurance and tax incentives have been granted local industry to encourage establishment of offices and facilities along with expansion. This Catalog Show will be held as part of Posidonia's International Shipping Exhibition and, consequently, offers U.S. suppliers a timely opportunity to gain an additional foothold in the local market. Call Robert E. Peterson, 202-967-3973.

Biomedical Equipment Exhibition/Symposium. Milan Trade Center. June 4-8. The Italian biomedical equipment market is growing 14 percent a year and the U.S. share is increasing. Opportunities are especially good for U.S. manufacturers of implantable pacemakers, I.P.P.B. respirators, pediatric respirators, artificial kidneys, gamma cameras, electronic blood cell counters, automated sample analyzers, echoencephalographs, surgical pacemakers, spectrophotometers and other diagnostic equipment. Contact nearest District Office or call Sam Spaulding, 202-967-4508.

Trade Mission, Computer Software, to Belgium, the Netherlands, and West Germany. June 13-27. Rescheduled from its earlier date, this Mission has now been expanded to include stops in Brussels, Amsterdam, Dusseldorf, and Frankfurt. These cities offer expanding software markets, with studies indicating combined sales of over $190 million in 1973 and a market growth which has averaged 25 to 30 percent annually. Opportunities exist for identification, utility and application packages, as rising labor rates and changing energy supplies force greater automation and more sophisticated use of existing installations. Call Wanda Ale, 202-967-3119.

Hotel and Restaurant Equipment Exhibition. U.S. Trade Center, Frankfurt. June 17-20. Increasing costs and continuing labor shortages are factors leading to an expanding market for more efficient, labor-saving, U.S.-made equipment. The German hotel, restaurant and resort industries are attempting to expand facilities to meet demands of more affluent German travelers and foreign tourists. Owners of German hotels and restaurants are eager to obtain high quality, productivity-boosting U.S. equipment for food and beverage preparation and service. Call Jerry Morse, 202-967-2177.

Aviation Ground Support Equipment & Aircraft Services Exhibition. Singapore Trade Center. June 17-21. The timing is appropriate for U.S. initiatives on an expanded scale to sell aviation support equipment in this market. At the present time the entire Singapore marketing area is experiencing an economic boom, partly brought about by world demand for local commodities and labor. In addition, the region is industrializing and enjoying high rates of foreign and domestic investment. Also, tourism is on the increase, and the demand for air travel and air freight is growing faster than in any other part of the world. Call Lee Barnes, 202-967-5545.

Telecommunications Equipment. Mexico City Trade Center. June 24-28. The Mexican Government has placed high priority in its overall economic development plan on improvement and extension of telecommunications facilities: from provision of telephone links to rural villages to installation of sophisticated avionics systems. Furthermore, the larger private firms are considering installation or expansion of their own telecommunications systems. Mexico's apparent consumption of this equipment has been growing about 17 percent annually, reaching $167 million in 1971. A full 60 percent of this total must be imported. Call Porter Clary, 202-967-5040.

Food Processing Machinery and Equipment. Buenos Aires Trade Center. June 24-28. The Argentine market continues to need imports of items incorporating the latest processing techniques, but not necessarily high volume equipment. Special interest items include processing machinery and equipment for the fishing, meat, wine and fruit and vegetable processing industries. Call Carolee Heileman, 202-967-2322.

Laser, Electro-Optical and Photographic Systems. Stockholm Trade Center. June 24-28. The Nordic countries represent a growing market for American optics-related instruments, systems and components. In 1972 U.S. suppliers exported $12 million worth of these products to Denmark, Finland, Norway and Sweden. Call Cliff Stanley, 202-967-4461.

Printing and Graphic Arts Equipment Catalog Exhibition, Hong Kong, Taiwan, Thailand, July 9-25. Local printing and graphic arts industries in these nations are expanding rapidly; causing many firms to upgrade the quality of their operations, for purposes of competition. Recent currency revaluations by the U.S. and the recognized high quality of U.S. machinery and materials contribute to making this area of the world, and especially the markets in question, most faborable for U.S. suppliers. Call Robert E. Peterson, 202-967-3973.

Automotive Parts. Tokyo Trade Center. July 22-26. The Japanese auto industry is actively looking for U.S. sources of auto parts and accessories to be incorporated in their cars and trucks. Rapidly rising prices and uncertain supplies of Japanese-made components may result in many large volume, long-term contracts between American original equipment manufacturers and the 11 Japanese automobile manufacturers who make up the second largest auto industry in the world. Contact Randall Miller, 202-967-2709.

Shoemaking and Leather Goods Machinery and Equipment. Buenos Aires Trade Center. July 22-26. The Argentine shoe manufacturing industry is a highly atomized and undercapitalized sector in need of modernizing its basic equipment. It has, however, the advantages of access to a large, steady domestic supply of high-quality leather, and lower labor costs than those prevailing in the European and Brazilian shoemaking industries. If the current trend of increasing foreign demand for Argentine shoes continues this year, the Argentine shoe industry will be forced to expand and upgrade its production facilities. Investment over the next three years for new equipment could range from $6 million to $10 million, most of which will have to be imported. Local equipment manufacturers cannot supply more than a fraction of the potential demand for new machinery. Display equipment for this exhibition must be 100 percent U.S. origin. Call Vicky Eicher, (202) 967-4580.

Sales opportunities in 9 U.S. commercial exhibitions, 9 catalog exhibitions, 30 shows at the U.S. Trade Centers, 4 trade missions and 1 technical sales seminar are being offered to present and potential U.S. exporters between now and December.

Each Trade Center exhibition is limited to one particular line of products and centers are located in Beirut, Buenos Aires, Frankfurt, London, Mexico City, Milan, Paris, Singapore, Stockholm, Sydney, Tehran, and Tokyo. Trade Centers are scheduled to open in Taipei and Seoul this month. For further information on the Trade Center shows described or for more facts on U.S. exhibitions, **write:** *Director, Office of International Marketing, Room 4015, U.S. Department of Commerce, Washington, D.C. 20230.*

U.S. specialized trade missions and technical seminars are comprised of groups of U.S. businessmen organized by the U.S. Department of Commerce to travel abroad to promote the export of U.S. goods and services produced by their particular industry. **Write:** *Trade Missions, Room 4219, U.S. Department of Commerce, Washington, D.C. 20230.*

Analytical and Laboratory Instruments Catalog Exhibition, Malaysia, Philippines, Singapore, July 24-Aug. 7. Implementation of plans for product improvement and reduction of labor costs, in the rapidly expanding industrial sectors of these nations, have created a growing market for analytical laboratory instrumentation. Call Robert E. Peterson, 202-967-3973.

Hotel and Restaurant Catering Equipment Catalog Exhibition. Lesotho and Swaziland, August. Lesotho and Swaziland are two of the newest, fastest-growing vacation areas in Africa, which attract thousands of tourists year-round. This introductory trade promotional activity is geared to help meet the growing demands of this area's burgeoning tourist industry. Call Robert E. Peterson, 202-967-3973.

Printing and Graphic Arts Equipment, Mexico City Trade Center, Aug. 5-9. The Mexican market for printing and graphic arts equipment grew at an impressive rate of 10 percent in 1972. The U.S. share of the market was a healthy 57 percent and the recent monetary realignment increases the attractiveness of high quality, U.S. manufactured goods. The outlook is for continued growth and increased imports during the next five years. Call Porter Clary, 202-967-5040.

Electronic Data Processing Equipment, Related Business Equipment and Systems. Singapore Regional Trade Center. Aug. 19-23. Singapore, the commercial/financial center of Southeast Asia in addition to its growing entrepot economy is emphasizing increased industrialization. Because of this emphasis, Singapore's demand for high-speed data handling and the most modern business methods is burgeoning almost as fast as its economy which boasts 10 percent-plus growth rates for the last several years. This demand prompted the U.S. Regional Trade Center in Singapore to mount a major exhibition featuring this equipment. Participation is limited. Please contact your nearest U.S. Department of Commerce District Office or Peter M. Dunlap, Washington, D.C. Coordinator, Tele: (202) 967-5545.

Electronic Components, London Trade Center. September. This opening exhibition of the new U.S. Trade Center Center in London is designed to increase the sales and the market share of U.S. solid state semiconductor devices (SSD) to British original equipment manufacturers of electronic data processing, telecommunications, and automotive equipment, domestic appliances, and industrial analytical and control instrumentation both in the civilian and defense sectors where applicable. The value of apparent consumption of SSD components in the United Kingdom in 1973 was estimated at $190 million, to increase by 36 percent to $297 million in 1977. Call Edward Walls, 202-967-4256.

Polymery-74, Foreign Exhibition for the Plastics Industry, Moscow. Sept. 3-16. The Soviet Five-Year Plan targets investments for the petrochemical industry at 4.2 billion roubles in 1974 and 4.7 billion in 1975. Soviet-built equipment for the plastics industry has proven inadequate in terms of variety, quantity, and technology. Soviet imports of equipment, processes, and technology for the petrochemical industry jumped 10 percent in 1971 and 56 percent in 1972. Call Jim Robb, 202-967-4810.

Educational Communications Systems, Stockholm Trade Center, Sept. 9-13. Market research surveys indicate a great interest by the Scandinavians in U.S. technology in education communication systems, including such items as: Computer assisted instruction, closed circuit television (CCTV) systems, video tape recorder (VTR) equipment, microfilm/fiche reading and storage systems, projectors (still and motion picture), copiers and reproduction equipment, packaged training kits, multimedia learning systems, tape recorders and cassettes, video-cassette systems and library aids. An extensive promotion campaign will be conducted in the four Scandinavian countries to insure the attendance of key decision makers, buyers and training professionals. The audience will be comprised of representatives from public and private educational institutions, company training directors, industrial training boards, governmental agencies, training trade associations, hospitals and medical schools, libraries and television and film enterprises. Call William Beiring, 202-967-3276.

Advanced Fluid Power Equipment, Tokyo Trade Center. Sept. 9-14. The fluid power equipment market in Japan recorded an annual average 30 per cent rate of growth through the decade of the 1960's. A high level of demand for advanced fluid power equipment including water-cooled and oil-less compressors, quick-connect couplings, level and pressure gauges and intensifiers is expected to continue through 1977. Sales of U.S. manufactured air and hydraulic motors, servosystems and servovalves, actuators and hydrostatic transmissions as well as fluid power equipment for the aerospace industry are also expected to increase dramatically in the coming 24 months. For details contact Ray Alvarez, 202-967-2461.

16th Brno International Engineering Fair, Brno, Czechoslovia. Sept. 11-19. The U.S. Exhibition theme will be "Electronic Data Processing" and will feature computers, peripherals, calculators, office machines, and other statistical machines and electronic data processing equipment including software. Market research estimates that Western sales potential for EDP equipment over the next three years (1974-1976) is $42-52 million, with approximately $14-17 million in 1975. The U.S. exhibition will be limited to 20 exhibitors. Call Paul M. Terlizzi, 202-967-5163.

Industrial and Commercial Security Equipment, Paris Trade Center. Sept. 16-20. American manufacturers and suppliers of security equipment for fire protection and extinction, burglary and pilferage detection and prevention, access controls and communications equipment have growing opportunities to sell to French buyers. Rising theft and crime, special fire protection legislation, generous discounts on insurance premiums for adequately protected premises are compelling companies to consider-and-to-buy protective security devices. Firms taking part will benefit from a market promotion campaign conducted in France to attract buyers, agents and distributors. Contact Charles M. Whitley, 202-967-5381.

Business Automation Equipment (JEEP), Milan Trade Center. Sept. 20-25. In 1973 the demand for business automation equipment in Italy was $480 million. By 1976 the demand is expected to exceed $900 million. Emphasized will be accounting and bookkeeping systems; desk-top and minicomputers; highspeed copiers; microfilm equipment including retrieval, storage and filing; computer cash registers, and terminals; punched tape and magnetic tape billing and invoicing machines; microfiche; computer terminals with business applications. Call Peter Wilson, 202-967-2434.

Electronics Industry Production and Test Equipment and Electronic Components Equipment, Regional Trade Center, Singapore. Sept. 23-27. Regional market research in Singapore, Malaysia, Indonesia, and Thailand indicates highest potential for sustained growth in exports offering favorable opportunities for U.S. manufacturers of such equipment and components. Participation is limited. Contact Peter M. Dunlap, 202-967-5545.

Biomedical Equipment, Frankfurt Trade Center and Paris Trade Center. Sept. 30-Oct. 3, and Oct. 8-11, respectively. This tandem scheduling gives U.S. firms the opportunity in either or both events. The biomedical market in France is growing rapidly. The U.S. supplies about one-sixth of French imports and one-third of Germany's in this field. Opportunities are especially good for U.S. manufacturers of equipment such as cardiac output analyzers/computers, implantable pacemakers, electro- and phono-cardiographs, positive pressure breathing apparatus, and nebulizers, echoencephalographs, cystic fibrosis analyzers, monitors, gamma scintillation cameras, oxygen flowmeters, chromatographs, automated blood cell counters, atomic absorption/emission spectrophotometers, spectrofluorometers, and a wide variety of other such equipment. Call Bob Wallace, 202-967-3748.

Offshore International Olympia, London, Oct. 7-11. This exhibition being held in cooperation with Industrial Trade Fairs, Ltd., is designed to bring U.S. goods and services to the emerging European offshore market for oil and natural gas exploration and production, but especially to ongoing activities in the North Sea and adjacent maritime areas West and South of Britain and Ireland. The projected value of North Sea capital investment in 1973 was estimated at $480 million. The projected value in the latter 1970s should total $1.4 billion with the UK shelf area share at $720 million. Contact C. Edward Walls, 202-967-4256.

Bucharest International Fair, Bucharest, Romania. Oct. 13-22. The U.S. Exhibition theme will be "Industrial Process Instrumentation and Control," and will feature equipment from simple temperature indi-

cation to the sophistication of on-line digital and analog computing. They will cover such process industries as chemical, pulp and paper, petrochemical, plastics, ceramics, textiles, mining, rubber, etc. In addition, the exhibition will include remote control valves, pumps, proportioning equipment as used individually or in a system where they are operated mechanically, hydraulically, pneumatically or electronically. The U.S. Exhibition will be limited to 20 exhibitors. Call Paul M. Terlizzi, 202-967- 5163.

AUTOMECHANIKA '74 (International Exhibition for Motor, Workshop and Service Station Equipment), Frankfurt. Oct. 18-22. The U.S. pavilion in this fair will offer American manufacturers of automotive maintenance, service equipment, parts and accessories an excellent opportunity to exhibit and sell their products at the largest event of its type in Europe. Call Bill Dawson, 202-967-4941.

PROJECT 2000—International Trade Fair on Pollution Control, Graz, Austria. Oct. 23-29. American manufacturers and suppliers of equipment for the control of air and water pollution, noise abatement, sewage treatment, solid waste disposal, and radiation control have a special opportunity to gain increased sales throughout Europe by exhibiting in the U.S. pavilion at PROJECT 2000. Trade visitors from the governmental buying units of Eastern Europe concerned with environmental protection will be in heavy attendance. Call David Katz, 202-967-3748.

Building Products and Construction Equipment, Stockholm Trade Center and Paris Trade Center, Oct. 28-31 and Nov. 5-8, respectively. Commerce is offering manufacturers and suppliers of building products and construction equipment a splendid opportunity to gain increased sales in France and Scandinavia by exhibiting at one or both of these shows. France, which has the fastest growing economy in Western Europe, and the Scandinavian countries of Sweden, Norway, Denmark, and Finland offer according to recently conducted market research bright prospects for the sale of U.S. products in the building field. Call Andre Williams, 202-967-5381.

Electronica 74, Munich, Germany. Nov. 21-27. Commerce will have an American trade section at this major event, the world's largest trade fair for production in the electronics industry covering electronic components, test and measuring instruments, and production equipment for the electronics industry. Phenomenal results by U.S. participants at the last ELECTRONICA plus recent market information indicates outstanding success for exhibitors in the American section of this show. Call the nearest Commerce District Office for details.

Minicomputers and Peripherals, Paris Trade Center and Frankfurt Trade Center, Nov. 25-28 and Dec. 3-6, respectively. The U.S. Department of Commerce is sponsoring two Minicomputer Peripherals Exhibitions within a two-week period at the Paris and Frankfurt Trade Centers to facilitate participation in both. However, an exhibitor may elect to participate in either one.

The outlook for sales of minicomputers in both France and Germany during the 1973-77 period is extremely favorable. Germany is the third and France the fourth largest user of computers and related equipment to both France and Germany. Participants in previous exhibitions of this type have reported excellent results and market research indicates the potential to exceed even these successes. Call Don Schmadel 202-967-2177.

TELLING THE TRADE OPPORTUNITIES STORY—*A film on the Commerce Department Trade Opportunities Program to be shown to business audiences overseas is being prepared by the United States Information Agency. USIA producer Frank Kemp, at left, explains his plans to Deputy Assistant Secretary for International Commerce Marinus van Gessel, who supervises the program. The action involves a Washington computer terminal that helps speed foreign purchase requests to individual U.S. firms.*

UNDP Approves Financial Assistance Of $200 Million For 22 Programs

The Governing Council of the UNDP approved 22 more country and intercountry programs at its January session. This brings the total to 105 country and intercountry programs that have been approved to date.

Countries for which these programs were approved will receive approximately $200 million in financial assistance from the UNDP. About $300 million will be provided by the recipient countries. Some $500 million will be expended for equipment and services over the projected period allotted for these programs. The country and intercountry programs may serve as future projects, and may also be used as potential leads for sub-contractors.

Each country has an individual program which is 30 or more pages in volume. The programs are available to interested U.S. firms from the Office of Export Development, Trade Opportunities Program, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. Copies of these programs are also available at the following District Offices: Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Detroit, Houston, Indianapolis, Kansas City, Los Angeles, New York, San Francisco and Seattle.

DP/GC/R.1 — Algeria; DP/GC/R.1 — Belize; DP/GC/R.1—Burundi; DP/GC/R.1—Caribbean; DP/GC/R.1—Gilbert and Ellice Islands; DP/GC/R.1—Greece; DP/GC/R.1—Iceland; DP/GC/R.1—Indonesia; DP/GC/R.1—Iraq; DP/GC/R.1—Libyan Arab Republic; DP/GC/R.1—Malta; DP/GC/R.1—Nicaragua; DP/GC/R.1—Niger; DP/GC/R.1—Saudi Arabia; DP/GC/R.1—Senegal; DP/GC/R.1—Somalia; DP/GC/R.1—Spain; DP/GC/R.1 — Surinam; DP/GC/R.1 — Trinidad and Tobago; DP/GC/R.1—Yemen; DP/GC/R.1—Gambia.

Kuwait Firms Having Capital Seeking U.S. Partners For Projects

Prominent Kuwaiti investors express strong interest on collaborating with U.S. companies to undertake a variety of business projects in Kuwait, preferably on a turnkey basis. These projects include the manufacture of electric pumps, aluminum, paper products, wood products, fiberglass, carpeting, textiles, plastic cups, and sanitary ware. There is also interest in packaging and large scale poultry raising enterprises.

The Kuwaiti businessmen can provide all capital, and sure and cheap supplies of energy. In some cases, the market need not be limited to Kuwait. For those projects that prove feasible, the Kuwaiti investors will contract for the U.S. firm to provide equipment, management and perhaps marketing services, preferably on a turnkey basis.

For the names of personal contracts, write: Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74066.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce Office.

OPIC indicates that the country involved is eligible for investment insurance coverage written by the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

0100 — BOLIVIA — Joint venture partners are sought to undertake several **agricultural production projects,** including development of a soybean plantation, a cotton plantation, alpaca and llama hair industries, a white and black pepper plantation and a garlic plantation. Feasibility studies are available for all of the proposed ventures. Additional information available from Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74097. OPIC.

1499 — TURKEY — Seeks know-how for the **processing of asbestos ore** in the district of Hatay, Antakya Province. Expect to produce 10,000 tons per year of asbestos fiber. For a report with additional details and name of Turkish firm, write Foreign Investment Services Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74095. OPIC.

1521 — FRANCE — Licensing rights for construction of **small detached houses** is sought by a French group now specializing in insulation, carpeting and wall and floor coverings. Company has annual sales of $3.2 million. Gaston Voyard, president, Entreprise VOYARD, S.A., 9 rue Fleuret Charpentier, 77140 St-Pierre-les Nemours, France. P-74086.

2841, 2844 — ECUADOR — Seeks licenses to manufacture **toilet soap and general toilet preparations.** Requires know-how on a royalty basis. Firm will provide sales and service throughout Ecuador. German made machinery and equipment is available. Roberto Garzozi Bucaram, Laboratorios "Garbu" Cia. Ltda., P.O. Box 797, Guayaquil, Ecuador. Correspondence may be in English. WTDR. P-74087.

3433, 3639 — AUSTRALIA — Subsidiary of a large, diversified group seeks licenses. Wants to manufacture **domestic, commercial and industrial evaporative coolers and oil and gas fired warm air heating equipment; domestic dishwashers and clothes dryers;** and **leisure products such as boats and camping equipment.** Firm presently producing evaporative air conditioning units; operates two plants. Has a nation-wide distribution network. Parent organization is active in agriculture, wine, shipping and manufacturing. Firm's managing director plans to visit United States in March. Chris Mundy, Dalgety Australia Ltd., 38 Bridge St., Sydney, New South Wales 2000, Australia. P-74098.

3443 — FRANCE — Well established metalworking firm desires licenses from U.S. firms requiring heavy metal shaping and forming capability. Products such as large **metal buckets, trailer chassis, waste material disposal equipment,** are now among items turned out in a large facility in Verdun. This plant, which covers 5,000 square yards, includes a 700-ton press with 23 inches cutting capacity; it is located on rail and highway routes to Germany and Luxembourg. J. Martin Smith, Inter Continental Equipment Co., 605 Rue de la Reine-Blanche, 78 Carrieres/Poissy, France. WTDR. P-74093.

3500 — FRANCE — An important machinery manufacturer seeks licenses. The firm wants to produce any **mechanical equipment of medium size** (4 meters by 2 meters) **with a maximum weight of three tons.** Company manufactures and markets drilling equipment, machine tool accessories, and fabricated iron and steel products. It employs about 400 and enjoys a strong credit reputation. Charles Bachy, managing director, Usine Metallurgique de Domine, 86530 Naintre, France. WTDR. P-74088.

3500 — GERMANY — Seeks licenses to manufacture all types of **medium and heavy machinery.** Interests include building material and construction machinery, foundry equipment, non-cutting machine tools and other industrial equipment. Firm produces cranes, ship equipment, containers, metal pressure tanks and machinery for the chemical industry. It employs 900 and markets its products throughout the world. It has close ties with a number of industrial engineering companies in the Ruhr area. Company enjoys an excellent reputation. Hans-A. zum Hingst, Friedrich Kocks GmbH, Richard-Dunkelstrasse 55 (Postfach 1), 28 Bremen, Germany. WTDR. P-74089.

3530 — THE NETHERLANDS — A medium-sized manufacturer of all types of **materials handling equipment** seeks licenses. Wants to produce conveyor belt systems for medium and high capacity rates (200-1,000 lbs. per hr.-bulk and bag) for handling sand and gravel, cement and lime, fertilizer and sugar; rollertracks for weight-unit per meter, 100 lb.; chain conveyors; elevators; and ship loading and unloading equipment. The firm employs 110; has annual sales of around $2.5 million. Occupies a leading position in its field. J. A. M. van Broekhoven, manager, Tempo Nationale Transportwerktuigenfabrieken B.V., 281, Stationsweg, Woudenberg, Netherlands. WTDR. P-74090.

3585 — TURKEY — Large manufacturer of household appliances and fractional motors seeks venture to produce **compressors primarily for commercial refrigerators.** Firm is interested in production of hermetically sealed compressors from ⅓ to ½ horsepower. It already assembles compressors in a smaller range of horsepowers. Company projects annual sales of 10,000-15,000 units. Profilo Sanayi Ve Ticaret A.S., Ikinci Tasocagi Sokak Nos. 26/28, Mecidiyekoy, Istanbul, Turkey. P-74091. OPIC.

3613 — SWITZERLAND — Manufacturer of industrial power distribution equipment seeks licenses. Firm wants to produce **circuit breakers** with a 220- to 380-voltage range, and 10 to 150 amperes for use with all kinds of industrial machinery. Presently, the firm makes power and distribution equipment, as well as transformers. It is in the process of acquiring another firm which will substantially increase its manufacturing and sales capacity. The concern has excellent contacts to over 5,000 major end-users of its products. Mr. Russenberger, director, GUTOR AG, Postfach, 5430 Wettingen, Switzerland. P-74096.

3634 — SWITZERLAND — Seeks licenses to manufacture **novel household appliances.** Could include anything from simple, manually operated kitchen gadgets to relatively sophisticated electric household appliances. Products should preferably utilize plastics which Swiss firm is well equipped to handle. Company also produces electric motors, other components. Firm is well established manufacturer of electric household appliances, has excellent connections to large department store chains and similar organizations. Is also seeking U.S. licensees to produce its line of electric hair-dryers, shoe polishing machines and mixers. Mr. Steiner, sales manager, Gimelli & Co., AG, Bernstrasse 27, 3052 Zollikofen, Switzerland. P-74092.

3800 — SWITZERLAND — Seeks manufacturing rights for **precision electric, electronic devices and measuring instruments.** Interests include electronic voltage, current and resistance measuring equipment; electric and electronic instruments for measurement, display and control of process variables; humidity instruments; and ion selective electrodes and meters. The company is also prepared to perform precision winding jobs for electric miniature motors, miniature transformers and relays and coils. Company does precision grinding and polishing of synthetic watch and measuring instrument stones. It also produces wire-wound components and recently began manufacture of electronic instruments. The company employs 120. Fernand Scherrer, PERISO, Elettro-Industria, CH-6849 Isone, Switzerland. P-74094.

Licensing In U.S.

These are opportunities to manufacture foreign firms' products in the United States under a licensing agreement or, in some cases, as indicated, in partnership. For additional information on these opportunities write the Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248) referring to the appropriate file number.

GERMANY — A medium-size firm is seeking an American licensee to manufacture and sell its **building material** and **pre-constructed modules.** This new light-weight construction material is produced in a fully automated process and made of waste paper and a phosphate by-product called chemical gypsum. **File 2536.**

GERMANY — A small company is interested in licensing its **synthetic quartz glass process** to a firm in the United States. This type of glass, produced with a unique burner, is obtained almost completely free from conventional impurities. It is suitable for many applications, especially areas of

optics where high performance quartz glass is required. **File 2537.**

GERMANY — License for manufacture in the United States of all types of **quilts, blankets, bedspreads, synthetic fur blankets, and materials for automobile upholstery and shoes** is being offered by a large firm. This company processes raw materials in its own plants through every stage of production to the finished product. Interest in cross-licensing has also been expressed. **File 2538.**

GERMANY — A producer of **lung-functioning measuring systems** wishes to license manufacture of this type of equipment in the United States. The systems reportedly enjoy a good market throughout Central and South America, Africa, and other European countries. The firm is also interested in cross-licensing. **File 2539.**

SWITZERLAND — Company offers its line of novel **structural bearings** for manufacture under license in the United States. These bearings were developed to preclude cracking in roofs, walls, and other parts of concrete buildings that often results when the structure settles. The bearings have had considerable success and are already manufactured under license in most European countries. **File 2540.**

SWITZERLAND — Producer of household appliances offers for license in the United States its complete lines of **electric household hair dryers and drying/combing combinations, electric mixers and juicers, electric household shoe polishing machines, and hand operated fruit and vegetable droppers and biscuit makers.** Company is interested in cross-licensing, preferably with items involving use of plastics. **File 2541.**

SWITZERLAND — Small firm wishes to license in the United States its two **tear gas defense sprayers.** One type produces tear gas foam, and the other a mist spray. Both were developed in collaboration with the University of Bern medical faculty and the Zurich police department. The sprayers are said to be highly effective but absolutely harmless. **File 2295-R.**

SWITZERLAND — Company of moderate size is seeking a licensing arrangement or joint venture with a U.S. firm, ideally a power utility for production of **transformer stations** in the United States. These transformers, assembled and mounted on a prefabricated concrete mast at the plant, are allegedly safer, cheaper and more compact than conventional transformer stations installed on the ground. **File 2380-R.**

Lebanese Firm Seeks U.S. Help In Making Children's Wear

A group of Lebanese investors seeks technological know-how, as well as capital investment or trademark rights from American manufacturers of baby and children's wear. American participation could take the form of joint venture or co-production agreements, trade mark or know-how licensing, or other arrangements as desired. This may also include the direct sale of the necessary machinery.

The firm claims to have arranged the capital necessary for the venture and to have taken the necessary steps to secure a presidential decree allowing establishment of the manufacturing facility. It expects to sell the output throughout the Arab Middle East.

Interested U.S. firms should write: International Business Enterprises. Attn: David N. Audeh, Gen. Mgr., 51 Strand Bldg., Hamra St., P.O. Box 9324, Beirut. Cable AWDRAMK; tel. 347071.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Trade Opportunities Division, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

Abbreviations used are: I (importer); D (distributor); M (manufacturer); A (agent); R (retailer). To avoid delays, requests for loan material must specify country, commodity, foreign government agency.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information, including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

Direct Sales

Foreign private firms are interested in agency agreements and/or distributorships for these products. See also "Representations" listings.

Gum, wood chemicals

●**28600 — IRAN** — Cresote, 6,000 tons. Renewal Tender Notice No. 544/52. Bid deadline 9 a.m., May 11. The Ministry of Roads, Iranian State Railways, Tehran, is interested in bids on the above item. Tender documents and specifications may be obtained from the Chemicals & Rubber Program, Room 2130, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-3464).

Steel mill products

●**33100 — HONDURAS** — 800 meters ductile cast-iron piping of 30 inch diameter; 3,390 meters ductile cast-iron piping of 36 inch diameter, with fittings. Tender No. Sanaa-BCIE 01-74; bid deadline indicated in specifications. Luis Moncada Gross, Manager, Servicio Autonomo National de Acueductos y Alcantarillados, Segundo Piso Edificio del Ministerio de Salud Publica y Asistencia Social, Tegucigalpa, D. C. Honduras. Specifications available at above address at a cost of $75.

●**33100 — IRAN** — Hiring services for recovery of iron from slag at Aria-Mehr Steel plant. Tender No. 152-72; bid deadline April 6, 1974. Iranian Economic Mission, 5530 Wisconsin Ave., N.W., Washington, D.C. 20015. Specifications available from Iron and Steel Program, Room 2001, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2438).

●**33100 — NEW ZEALAND** — Supply of approx. 250 miles of 16, 24, 30 and 35 percent diameter (406.4, 609.6, 762.0 and 863.0 mm) high test line pipe for pipeline project. Tender No. SMQ 1651; bid deadline March 19. Stores Manager, Ministry of Works and Development, P.O. Box 12-043, Wellington North, New Zealand. Tender documents available from Iron and Steel Program, Room 2001, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2438).

●**33100 — TAIWAN** — (A) Fifteen sets grab bucket for ore, single rope type, pull wire opening system, capacity 1,370 liters, net weight under 1,700 kgs., wire rope not less than 16 mm, working height not more than 5,000 mm, spread not more than 2,400 mm, oil buffer inner dia. not less than 73 mm. (B) Fifteen sets single rope grab bucket for cereal, cap. 1,600 lits., net weight under 1,500 kgs, wire rope not less than 16 mm, working hgt. not more than 2,400 mm, oil buffer inner dia. 73 mm. Tender No. GF3-630017; bid deadline March 19. Central Trust of China, Procurement Dept., Taipei. Specifications available from Iron and Steel Program, Room 2001, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2438).

Secondary smelting, refining of nonferrous metals

33414 — KOREA — Zinc ingot & billet. Preferably 99.9%. Mo. requirement 100 m.t. Firm is leading trader, employs 220. Interested U.S. firms contact Mr. Lee informing quotations, delivery terms, etc. Reply to—Mr. Lee Myung-Yul, Mgr., Business Dept., Washin Industrial Co., Inc., CPO Box 1121, Seoul 100. Cable: Whashin, Seoul; telex: 2238S; tel: 27-2161, Seoul.

Rolling, drawing, extruding of nonferrous metals

●**33500 — ALGERIA** — Coaxial connection, 2700 lines 12 mhz between Oran, Algiers and Constantine. Bid deadline extended to March 18.

●**33500 — INDIA** — Cupro-nickel tubes 30 mm x 1 mm x 10,000 mm. Qty. required 51,000 tubes weighing approx. 415 m.t. Delivery schedule: about 138 m.t. in June and balance in two equal lots at three-month intervals. Tender No. PUR/MPP/R-971/C-8E-3587; bid deadline March 18. Materials Manager, Bharat Heavy Electricals Ltd., Raipur, U.P., New Delhi, India. Tender

documents available from Copper, Lead and Zinc Program, Room 2001, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2438).

●33500 — **MALAYSIA** — 150 km. of 275 kv duplex 300 mm² al. area S.C.A. double circuit transmission line; 62 km. of 275 kv duplex 300 mm² al. area S.C.A. double circuit transmission line. This involves manufacture, supply, testing, packing, delivery, erection, commissioning and maintenance for 12 months. Contract No. 3022/3; bid deadline May 13. National Electricity Board of States of Malaya. Tender documents available from Messrs. Preece, Cardeu & Rider, Paston House, 165-167 Preston Road, Brighton BN1 6AF, Sussex, England.

Office computing, accounting machines

●35700 — **IRAQ** — The National Electricity Administration, 166 Al-Jumhurriya Strut, Baghdad, Iraq, has issued a tender No. 20/62/A/73 for supply of one process computer. Bid deadline is April 22. Copies of tender announcement and specifications are available from above address or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1006, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

Communication equipment

●36600 — **ALGERIA** — The Sonelec, 4-6 Blvd. Mohamed V, Algiers, has issued a tender for prequalification for professional electronics plant plus a development laboratory. Bid deadline is April 25. Bid should offer information on civil and military telecommunications equipment, measuring apparatus and calculating and small equipment. Correspondence in French is required. Copies of tender announcement and specifications are available from above address or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1001, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

●36600 — **ALGERIA** — The Ministere de l'Information et de la Culture, Direction de l'Administration Generale, 119 rue Didouche, Mourad, Algiers, has issued tender No. 280-E for the supply of a remote video vehicle fitted with two color TV cameras and videotape recorder. Bid deadline is April 15. Copies of tender announcement and specifications are available only from Radiodiffusion Television Algerienne, Direction des Services Techniques et de l'Equipment, Bureau 721, 21, Blvd. des Martyrs, Algiers, for $23.81.

●36600 — **ALGERIA** — The Ministere de l'Information et de la Culture, Direction de l'Administration Generale, 119 rue Didouche, Mourad, Algiers, has issued tender No. 277-E for the supply of one TV titling system. Correspondence in French required. Bid deadline is April 15. Copies of tender announcement and specifications are available only from Radiodiffusion Television Algerienne, Direction des Services Techniques et de l'Equipment, Bureau 721, 21, Blvd. des Martyrs, Algiers, for $23.81.

●36600 — **ALGERIA** — The Ministere de l'Information et de la Culture, Direction de l'Administration Generale, 119 rue Didouche, Mourad, Algiers, has issued tender No. 279-E for the supply of one mobile vidio disc recording unit. Correspondence in French required. Bid deadline is April 15. Copies of tender announcement and specifications are available only from Radiodiffusion Television Algerienne, Direction des Services Techniques et de l'Equipment, Bureau 721, 21, Blvd. des Martyrs, Algiers, for $23.81.

●36600 — **GREECE** — The General Directorate of State Supplies, 20 Canning St., Athens, Greece, has issued tender No. 13/1974 for 50 vehicle transceivers for Ministry of Agriculture. Bid deadline is March 12. Copies of tender announcement and specifications are available from Science and Electronics Division, U.S. Department of Commerce, Washington, D.C., 20230, or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1006, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

●36600 — **IRAN** — The Telecommunication Company of Iran, Kurosh, Kabir Ave., Bisim, Pahlavi, Tehran, has issued tender No. 52/96 for 500,000 insulators. Bid deadline is March 16. Copies of tender announcement and specifications are available from above address for Rials 3,000 (rials 67.5 equals $1.00) or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, Room 1006, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-4822).

●36600—**KENYA**—The East African Posts and Telecommunications Corporation will shortly be calling for worldwide tenders for Page Teleprinters and associated equipment. Tenders will be received only by the Corporation's agents in London. Tender notice number is E2Y/EAPT WB THR 3/37496. The bid deadline has not been established. Copies of tender announcement and specifications are available only from The Crown Agents of Overseas Government and Administration, 4 Millsank, London, SW1P3JD, England.

●36600 — **ALGERIA** — The Ministere des Postes et Telecommunications, 4 Blvd. Salah Bouakouir, Algiers, Algeria and the Compaginie Telefonica Nacional de Espana, Avenida de Jose Antonio, 28, Madrid 13, Spain, have issued a tender for supply and installation of coaxial submarine telecommunication cable between Bordj-el-kifan, near Algiers, and Palma de Mallorca, Spain (171 nautical miles) plus four miles of land lines and terminals at both ends. Correspondence in French (Algiers) and Spanish (Madrid). Bid deadline is March 30. Offers to be c.i.f. for land equipment and f.o.b. for submarine equipment. Technical literature required. To be operational by Nov. 1, 1975. Copies of tender announcement and specifications are available from above addresses in the languages specified above.

●36600 — **NORWAY** — The Norwegian Defense Construction Service, Sec. 3, Oslo Mil/Akershus, Oslo 1, Norway, has issued tender No. 1441/74/B/FBT III/GV/ILH/860.611 for 18 pulse code modulation units; 30 voice channels; nine repeaters; six microwave terminals; time division multiplex; 30 voice channels; 87 telephones with bell and lights; 170 normal telephones; six private automatic exchange, 50 to 100 lines. All quantities approximate. Bid deadline not stated. Only firms certified by the U.S. Department of Commerce are eligible to bid on NATO procurements. U.S. firms interested in certification should contact the Science and Electronics Division, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2328). Copies of tender announcement and specifications are available from above address in Norway.

Engineering, laboratory, scientific, research instruments

●38100 — **KENYA** — The Ministry of Education, P.O. Box 48823, Republic of Kenya, Nairobi, has issued Tender No. EDU/IDA/37 for compasses, theodolites, levels, process developer, duplicator, calculating machine, etc. Bid deadline is April 15. Tender documents available upon written request from above address.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Abrasive, asbestos, nonmetallic mineral products

3296111 3296131 3296135 3296138 3296151 3296198 — ICELAND — Various types of mineral wool for structural insulation. Quote f.o.b. Norfolk. Firm sells chiefly through its own centrally located retail outlet. Also to hardware stores nation-wide. Old estab., employs four: 1972 sales about ikr 20 million. Exclusive agency. B. Gudmundsson, Mgr., Bjorn Gudmundsson & Co., P.O. Box 531, Laugavegi 29, Reykjavik. Cable: Bjornco; tel. 24320.

Iron, steel foundries

3321535 — HONDURAS — Ductile cast iron pipe & fittings, 14-in. & over, as follows: 800 meters ductile cast iron pipe & fittings 36 in. inside dia.; 3,390 meters ductile cast iron pipe & fittings 30 in. inside dia. Buyer needs to receive offers as soon as possible; quote c.i.f. Puerto Cortes against l/c. Buyer is a very active representative of foreign firms, with excellent contacts in govt. agencies. Above items needed in order to participate in an important govt. tender. Total cost of pipe & fittings approx. $1 million. Exclusive distributorship. Call or cable—Oscar A. Giron, Mgr. & Partner, Mercadeo Internacional, S. de R. L., P.O. Box 1240, Altos de la Hoya, Tegucigalpa, D. C. Cable Merinter; tel. 22-5311.

Household appliances

3635011 — HONDURAS — Household vacuum cleaners (hand type). Buyer would like to receive offers (i.e. including complete catalogs & price lists) as soon as possible. Prices c.i.f. Puerto Cortes. Presently buyer represents several U.S. firms but only in industrial line (electric wire, transformers, turbines, etc.) & wishes expand business through repres. & excl. distribution of U.S. mfrs. of household appliances. Buyer is large importer/distributor. Annual sales volume more than one million dollars. Exclusive distributorship. Call or cable—Ing. Rene Alfredo Pinto, Mgr., Honduras Electrica Commercial S.A., P.O. Box 57, Tegucigalpa, D. C. Cable Hondelec; tel. 22-2914.

Electrical machinery, equipment, supplies

36920 — SWEDEN — Complete line of electric batteries, incl. flashlight, radio, electronic equipment, outdoor home lighting, appliances etc. Requests catalogs, samples. Representation and distributorship sought. AB Elektro-Gennel, Rosenlundsgatan 50, Stockholm.

Future Construction Abroad

POLAND—The Polish Foreign Trade Enterprise Polimex-Cekop has announced its intent to purchase a **plant to manufacture soft packaging materials for the food industry.** Output is to be as follows PVC foil mugs, 1 billion pieces, 10,000 tons; polyethylene conveyors, 4.2 million pieces, 6,600 tons; hard PVC foil trays and plates, 40 million pieces, 400 tons; sandwich (multilayer) plastics, 13,000 tons: cellophance/aluminum band/ polyethylene 2,700 tons; aluminum band/ polyproplyene, 200 tons; cellophane/polyethylene foil, 3,500 tons; polyamide foil/ polyethylene, 2,100 tons; cellophane/paper/aluminum foil, 200 tons; polyoproylane/polyethylene, 200 tons; double sheet cellophane, 600 tons; alum. foil/tissue paper/thermosealable varnish, 100 tons; polypropylene/aluminum foil/varnish, 2,700 tons; alum. foil PVC/thermosealable varnish, 1,500 tons. The plant should be equipped with machines for production of chemical foils and with printing equipment for eight-color work. U.S. firms capable of and interested in undertaking the design, equipment, and construction of this plant as a turnkey project should contact the U.S. Trade Development Center, c/o American Embassy Warsaw. U.S. Department of State, Washington, D.C. 20521, or Stefan Hilkner, Department Manager, Food Processing Plants Import Dept., Polimex-Cekop Foreign Trade Enterprise, Czackiego 7/9, 00-043 Warsaw. Telex: 814271.

GERMANY—The Economics Minister, Mr. Greulich, of Land Niedersachsen and representatives of Ruhrgas AG and Gelsenberg AG recently signed an option contract for the construction of a **liquid gas terminal in the port of Wilhelmshaven** on a 200-acre plot with a 2,000 foot waterfront. The final decision on construction will depend on further investigations concerning the suitability of the plot. The total investment in the Wilhelmshaven terminal, if it materializes, would amount to about $130 million. This would cover the cost of the first phase of construction to handle annual landings of 5-6 billion cubic meters of liquid gas per year. Eventually the capacity of the terminal would be increased to 20-25 million cubic meters per year.

CHILE—The Industrial and Construction Material Committee (CIMEC) of the Chilean Development Corporation (COREO) will undertake a feasibility study for a new **glass container factory** with a capacity of 20,000 m.t. a year, the current Chilean production shortfall. This project will cost an estimated $2.5 million. Interested U.S. firms should contact: Fernando Espinoza, Jefe, Division de Desarrollo Regional, COREO, Casilla 3886, Santiago.

DOMINICAN REPUBLIC—The Secretary of Public Works has announced that he is seeking the services of a consulting engineering firm to prepare **a feasibility study for the widening of Duarte Highway to four lanes** along its entire distance between Santo Domingo and Santiago (155 km.). The firm would also be asked to submit recommendations for the temporary reconstruction of the existing highway, prior to the actual widening. The Secretary indicated that, following submission of the feasibility study, an approach would be made to the Inter-American Development Bank for financing. The same consulting firm would then be asked to prepare the final engineering plan. Interested U.S. firms should contact Ing. Manuel Alsina Puello, Secretario de Obras Publicas y Comunicaciones, Ensanche La Fe, Santo Domingo.

CHILE—The State Railroad Co. hopes to request bids in January for about **eight electric generating plants** with an estimated cost of $6.3 million. According to company officials, the Government of Chile is currently talking with the Inter-American Development Bank about the possibility of financing this purchase. Interested firms may seek further details from: Victor Celis, Asst. Commercial Mgr., Ferrocarriles del Estado, Alameda B. O'Higgins 924, Of. 62, Santiago, Tel. 3161.

HONG KONG — Hong Kong Government is considering a second and larger **desalting plant** in 1980, expected to have a daily minimum output 100 million gallons of fresh water. Estimated cost is about HK$920 million. A decision would be made by mid-1974. U.S. engineering and construction firms should write directly to: H. J. Woodthorpe, Government Water Engineer (Desalting), Water Works Office, Public Works Department, Murray Bldg., Garden Rd., Hong Kong.

HONDURAS — The Honduran National Port Authority (ENP) plans to build a **port** in the Gulf of Fonseca in southern Honduras at Boca de Henecan. The cost is estimated at $4.5 million, to be IBRD-financed. A Dutch consulting firm, NEDECO, is working on final designs, to be completed during the first half of 1974. Construction is to begin by October, and last about 15 months. The facility will include a pier or platform of reinforced concrete measuring 40 meters by 145 meters plus warehouses, some for storing lumber and others for cotton. Contact Ing. Antonio Coello, Manager, Empresa Nacional Portuaria, Puerto Cortes, Cortes, Honduras, C.A.

HONG KONG — The C. Y. Tung Group is planning **construction of a shipyard** in Hong Kong, primarily for repair of ships having a gross weight up to 80,000 tons. Up to 10 ships could be under repair simultaneously. The shipyard, to be located on the northeast coast of Tsing Yi Island, would occupy 50,000 sq. ft. of land to be received from the government in exchange for land presently owned by C. Y. Tung, if government approval is obtained. If the project is approved several million U.S. dollars in design, engineering, and construction services and in hardware will have to be procured. Interested firms should contact: Mr. M. H. Liang, Manager, Marine Department, Island Navigation Corp., Chartered Bank Bldg., Des Voeux Road, Central, Hong Kong.

PERU—Surconsult Asociados, private management and engineering consultants operating in Arequipa, Southern Peru, is interested in contacting U.S. firms willing to provide price quotations, catalogs and related information regarding **necessary equipment for manufacture of the following plants:** rubber boots, plant capacity 600,000 pairs per year; vinylic floor tiles, plant capacity 800,000 sq. meters per year; cordage and twine, plant capacity 1,800,000 kilograms per year; corrugated cardboard containers, plant capacity 3,000,000 units per year; insecticides, plant capacity 12 metric tons per year. Contact: Surconsult Asociados, P.O. Box 914, Arequipa, Peru. Attn: E. Carrasco E., Manager.

TURKEY — The Railways, Harbors, and Airports Construction Department, Karayollari Binasi, Yucetepe Mahallesi, Ankara, is handling the **Cigli Airport Project** in Izmir. This agency is organized under the Ministry of Public Works and headed by Husnu Ilcu, Director General; Aydin Atabek, Deputy Director General. The existing Cigli Airport is under repair and a new airport project also known as Cigli will be located in the same area. Topographical studies have been made and project studies are under way. Reportedly construction tender for the new international airport will take place in 1974. Pertinent electric power and lighting, and electronic equipment will be procured from abroad. Interested U.S. firms should supply the above agency with their catalogs to introduce themselves.

BAHAMAS — Minister of Finance Arthur D. Hanna announced that the Commonwealth of Bahamas Government will be seeking a World Bank loan for a **new sewerage system** for the island of New Providence. The Bank has agreed to study a feasibility survey for the sewerage system prepared in 1971. When and if financing is made available, interested firms should contact the Ministry of Works, Nassau Ct., Nassau, which will be responsible for letting of contracts and overall supervision of the project.

IRELAND — A $255 million **oil refinery and petro-chemical complex** is planned for Bantry Bay by Shaheen Natural Resources Co. Inc. of New York. The company intends, subject to qualification, to build them without State grants. The refinery will produce 10 million tons of oil a year and employ 557 people, and up to 2,000 during the two years of construction work. The petrochemical complex will initially employ 130 people, building up to a work force of several thousand over ten years. Major products of the refinery will be gasoline, naptha, low-sulphur fuel oil, home-heating oil and low sulphur middle distillates.

PERU—Industrias Del Peru (INDUPERU), the State Industrial Enterprise, has completed pre-feasibility studies for installation of **three automotive parts manufacturing plants** in Trujillo, Northern Peru. They are: 1) Forging plant for manufacturing crankshafts, carburetors, connecting rods, pinions, axial axles, and related parts. Plant capacity 8,000 metric tons per year. Estimated investment $10.4 million. 2) Gray iron foundry (modular process) for producing engine monoblocs and cylinder heads. Capacity 30,000 metric tons per year. Estimated investment $18.4 million. 3) Die casting plant (injection process) for carburetor shells. Capacity 3,000 metric tons per year. INDUPERU is interested in contacting U.S. consulting engineers willing to provide technical information and assistance, and potential U.S. suppliers of machinery and equipment required as well as firms able to provide related technical know-how. Contact INDUPERU at Av. Dos De Mayo 1675, Lima 27; Tel: 40-6150; Attn: Ing. Cesar San Miguel Traverso.

HONG KONG — Hong Kong Government is considering building a **multi-million dollar tunnel** through a mountain on Hong Kong Island, linking King's Rd. of Causeway Bay and Quarry Bay. A survey by Maunsell Consultants, 664 Nathan Rd., 3/F, Kowloon, Hong Kong will be completed in May. Interested U.S. engineering and construction firms contact Gordon Sapstead, Chief, Public Works Department, High-

way Engineering Div., Murray Bldg., Garden Rd., Hong Kong.

NORWAY — Norsk Hydro, majority owner of the **refinery being built at Mongstad,** has announced future development plans in five stages through the early 1980's. Stage one, the refinery, is currently under construction. Stage two, ammonia and urea facilities worth $100 million with annual capacities of 350,000 and 350,000 to 400,000 metric tons respectively, is to be initiated "as soon as possible." Stage three involves expansion of the refinery capacity, ammonia, aromatics, and possibly other petrochemical products. Stage four, for the early 1980's, envisages a magnesium plant with an annual capacity of 50,000 to 60,000 metric tons, based on a process currently being developed by Hydro's R & D Staff. Stage five could be an alumina processing plant, if pollutant discharge problems can be solved. Contact: Norsk Hydro A/S, Bygdoy Alle 2, Oslo 2, Telex: 18 350.

NORWAY — SAGA Petroleum A/S & Co., is planning production of **synthetic proteins for foodstuff additives** based on oil or gas as raw material. Planned annual capacity would be 200,000 metric tons, and estimated cost is $200 million. Contact: SAGA Petroleum A/S & Co., Petrochemical Division, Maries Vei 20, 1322 Hovik, Norway.

SINGAPORE — Tuas Shipyard (new shipyard) has been incorporated as a wholly-owned subsidiary of Keppel Shipyard. A consultant has been appointed to do the feasibility study; Keppel is in the process of selecting a construction consultant. The proposed dry dock for Tuas Shipyard will be 1,000 ft. by 130 ft. capable of taking in ships of 150,000 DWT for repair. Construction of the dry dock and purchase of equipment will be on tender basis. Keppel is interested in receiving quotation of prices and time of delivery for dockyard equipment, such as cranes (15-60 tons), pumps, boring lathes from U.S. manufacturers. For further information, contact Mr. Chua Chor Teck, General Manager, Keppel Shipyard Pty. Ltd., P.O. Box 2169, Singapore 4; Cable: KEPPELDOCK.

COLOMBIA — The Departamento Administrativo de Aeronautica Civil (DAAC) will open a tender for construction of a **new terminal** at Barranquilla's Ernesto Cortissoz Airport. The terminal area will cover some 22,000 sq. meters, to handle 12 planes, including five jumbo jets, and to handle 1500-2000 passengers per hour. Terminal cost, including external parking areas and access roads, is budgeted at more than $5 million. Contact Departamento Administrativo de Aeronautica Civil, Aeropuerto El Dorado, Bogota.

GUATEMALA — Since 1969, the Defense Ministry has had plans to transfer its present facilities in Guatemala City to a new city site. However, since then plans for this **$8 million, 450-500 bed hospital** have been stalled as the Ministry attempts to determine how to finance this project. Presently, it appears to be leaning towards the use of supplier credits. For further information contact: Dr. Juan Paiz Rodriguez, Hospital Militar, 4a. Calle y 6a. Ave. "D", Z. 10, Guatemala City.

IRELAND — A £9 million ($21.15 million) **fertilizer plant** is to be built at Whitegate, County Cork, by Co-Operative Agricultural Purchasers of Cork in conjunction with N-Ren Inc. of Cincinnati. The new company will be known as Eir-N Chemicals Ltd. About 150 people will be employed in the plant, which is due to begin producing nitrogin and ammonia fertilizers in 1975. The 30-acre site for which planning permission has been sought is less than a mile from the Whitegate Oil Refinery. The complex will have an output of 60,000 tons of ammonia, 20,000 tons of nitric acid, 72,000 tons of urea and 70,000 tons of intermediates in the first year. The shareholders' equity totals £2 million and the balance of £7 million capital consists of credits granted by the Austin and Voest-Alpine Group and the Export-Import Bank. The cost of U.S. goods and services required for erection of the plant is estimated at $8 million.

BELGIUM — Ground-breaking of Quality Inn — Borgerhout (Antwerp) took place on Dec. 7. The **238-room/360-bed Inn,** located off the E-3 Lisbon-Stockholm super highway, would be in operation by late fall of 1974. Other Quality Inn European operations include one in Bremen, Germany and a second due to be completed in Duesseldorf in May. A park will occupy the area between the hotel and the highway. The construction cost is estimated at BF 200 million.

NICARAGUA — Nicaraguan purchases of **new hospital equipment** should amount to U.S. $5-$7 million over the next five years. The Managua earthquake destroyed all but one medium-size general hospital in the capital. As a result, a vigorous hospital building program has begun and will continue for several years. In addition, the government is studying recommendations to upgrade hospital equipment and facilities nationwide. A report from the American Embassy Managua on Nicaragua's hospital building program, a list of hospitals in Nicaragua, and a list of major distributors of hospital equipment in Nicaragua, are available from the U.S. Department of Commerce, Trade Opportunities Program, Rm 1322, Washington, D.C. 20230.

GUATEMALA — Minister of Communications and Public Works Gustavo Anzueto announced that the government is moving ahead as soon as possible with plans to develop the country's **geothermal resources** in the Moyuta area of the Zacapa Department close to the Salvadorean border. This is a $6 million project; the Government of Guatemala will finance $1 million, and an IDB loan $5 million. The first stage of the plant is to produce 30 MW of electricity. For further information interested U.S. firms should contact: Joaquin Godoy, Director, or Oliverio Casasola, Technical Director, INDE, 6 Av. 2-73, Zone 4, Guatemala. Tel: 65-091/4.

AUSTRALIA — There are three important State-Commonwealth decisions to be made before the planned **U.S.$8.9 billion Pilbara Industrial Development Plan** can be implemented. The proposed complex to be developed over a ten-year period would include steel works, aluminum smelter, caustic soda plant, uranium enrichment plant, ferromanganese smelter and a liquid natural gas facility. U.S. firms should make known their interest to: Director, Pilbara Study Group, GPO D-160, Perth 6001, Western Australia. Expressions of interest will be cataloged and kept on file for future reference.

TURKEY — The integrated Antalya sawmill, kraft pulp, linerboard complex and Forestry Resources development projects should offer opportunities for U.S. firms. SEKA (Turkiye Seluloz ve Kagit Fabrikasi Isletmesi) has established an agency entitled "SEKA Antalya Muessesi Mudurlugu", i.e. SEKA Antalya Establishment (Telegram: SEKAMAN, Izmit; Tele: Izmit 3110 through 3117) to build an integrated forest products mill near Manavgat in the province of Antalya. The SEKA complex aims at producing approx. 182,000 cubic meters of sawnwood annually as well as 155,000 metric tons of linerboard or 90,000 metric tons/year of multiwall sack paper based on kraft pulping process. U.S. suppliers interested in prequalifying for bidding on the supply of materials and equipment related to the SEKA portion of the project should request prequalification inquiry notice No. 1001 from Mr. J. F. Edgar, Purchasing Manager, Sandwell & Co. Ltd., 1550 Alberni St., Vancouver, B.C., Canada V6G 1A4, with a check for Canadian $5.00. Copies of prequalification applications should be sent to SEKA as follows: Turkiye Seluloz ve Kagit Fabrikalari Isletmesi, Genel Mudurlugu, Attn: Mr. Ferik Colgecen, Izmit, Kocaeli, Turkey, by March 15, 1974 (12:00 noon local). The SEKA complex also includes power generation and related site facilities, kraft recovery boiler, 30 MW turbo generator and sawmill equipment. SEKA and Sandwell have issued invitations for tenders on a linerboard machine. Any U.S. firms which have not indicated interest in this tender and have built linerboard machines of 500 TPD or over are still invited to indicate immediately their interest. The aggregate cost is $170.1 million including $68 million in foreign exchange for both the SEKA and Directorate General of Forestry portions. The latter involves increasing log production in the Antalya forestry region from its present level of 300,000 cubic meters to 800,000 cubic meters/year, almost entirely of pine. Approx. $7.9 million in foreign exchange expenditures will be involved for the forestry portion of the projects. The industrial projects of SEKA will require an investment in foreign exchange amounting to $56.1 million. IBRD has extended a $40 million credit and Export-Import Bank $24 million. Turkish currency expenditures for domestic purchases will be provided by Government of Turkey agencies, as well as the State Investment Bank. The project, expected to be completed by 1977, also includes feasibility studies on future integrated forest utilization projects. One has been defined in the Adana/Mersin/Maras regions (east of Antalya) and others are being defined. The basic feasibility study for natural pine forests utilization in the Antalya region established requirement for procurement of graders, compressors, loaders, rippers, and dozers (large, medium and small sizes), etc; these should interest several U.S. suppliers. Contact: Directorate General of Forestry (Orman Genel Mudurlugu), Bakanliklar, Ankara.

CANADA — Quebec's second **nuclear power plant,** known as Gentilly 2, is now under construction on the St. Lawrence River across from Trois-Rivieres. Preliminary excavation work started last Fall and actual construction should start about April 1974. The plant will cost C$360 million and have a capacity of 600,000 KW when completed in 1979. It will use the Canadian Deuterium Uranium-Pressurized Heavy Water (CANDU-PHW) system, and the heavy water required will be provided by Atomic Energy of Canada Ltd. (AECL). The plant is being built by Hydro-Quebec, which will act as general contractor and supervisory engineers. Mr. J. Albert Labbe of Hydro-Quebec, 75 Dorechester Blvd. West, Montreal, Tel: 514/875-4311, Ext. 1749 is project manager. AECL will act as consulting engineer for the reactor and Canatom Ltd. will provide the other engineering services. According to Mr. Labbe, tenders will be called in 1974 for construction of the administration building, as well as for additional turbines, pumps and heat exchangers. Mr. Labbe also said that the AECL will eventually call tenders for some C$5 to C$6 million of specialized nuclear plant equipment. Hydro-Quebec follows a Buy-Quebec policy whenever possible and it is not known if tenders will be public and open to U.S. bidders.

New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to Room 6880, U.S. Department of Commerce, Washington, D.C. 20230, or to any of its district offices.

DOMESTIC AND INTERNATIONAL BUSINESS ADMINISTRATION

BUREAU OF EAST-WEST TRADE

Export Administration

Export administration bulletin—supplement to export administration regulations (formerly export control bulletin and regulations) (EAB-OEA-110).

BUREAU OF DOMESTIC COMMERCE

Monthly Industry Report

Construction review. Vol. 19, No. 11. Annual subscription $11.50 (add $3 for foreign mailing). Single copy $1. Featured in this issue: Thermal insulation in building construction.

BUREAU OF INTERNATIONAL COMMERCE

Overseas Business Reports

Annual subscription $28.50 (add $7.25 for foreign mailing). Single copies 30¢ each.

Five Year Plan summary: Romania (OBR 73-29C). 4pp.

Selling in India: dealing with the private sector (OBR 73-74). 14pp.

SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION

BUREAU OF ECONOMIC ANALYSIS

Survey of current business. Vol. 54, No. 1. January 1974. Annual subscription, including weekly statistical supplement, $34.45 (add $8.65 for foreign mailing). Single copy $2.25.

Business conditions digest. Series ES1, No. 74-1. January 1974. Annual subscription $45.80 (add $11.45 for foreign mailing). Single copy $3.70. Monthly report bringing together many of the economic time series found most useful by business analysts and forecasters.

BUREAU OF THE CENSUS

Bureau of the Census catalog: Jan.-Sept. 1973. 216pp. Annual subscription (four consecutive issues) $10.90 (add $2.75 for foreign mailing). This issue $2.60.

Expenditure and employment data for the criminal justice system: 1971-72 (GSS No. 66). 344pp. $3.05. The sixth in a series of annual reports presenting public expenditure and employment data on criminal justice activities in the United States, this report was prepared jointly by the Bureau of the Census and the Law Enforcement Assistance Administration of the U.S. Department of Justice. Specific data are supplied for the Federal Government, each of the 50 State governments, and the aggregate local level of government within each State.

Census Portraits

Census statistics sketch portraits of the people of each state in the nation. Four pages each; 10¢ per copy. A 25 percent discount is available on orders of 100 or more copies mailed to the same address.

District of Columbia (CP73-9).
Illinois (CP73-14).
Michigan (CP73-23).
Mississippi (CP73-25).
Missouri (CP73-26).
Montana (CP73-27).
Oklahoma (CP73-37).
Tennessee (CP73-43).
Vermont (CP73-46).
Washington (CP73-48).
West Virginia (CP73-49).
Wyoming (CP73-51).

Country Demographic Profile

Republic of China—Taiwan (ISP-30, No. 3). 10pp. 25¢.

Economic Censuses and Surveys

U.S. commodity exports and imports as related to output: 1971 and 1970. 212pp. $3.05. 14th in a series prepared to help meet the need for a systematic body of statistical information on the relation between U.S. domestic output and commodity exports and imports.

Small-area data notes. Vol. 9, No. 1. Sold in combination with Data Access Descriptions at an annual subscription price of $6.50. Single copy price varies; this issue 25¢.

Agriculture

Cotton ginned prior to January 15, by states: 1973, 1972, 1971, and 1970 (A10: 73-11). 2pp. 10¢.

Construction and housing

Housing starts: December 1973 (C20-73-12). 12pp. Annual subscription $5.15 (add $1.30 for foreign mailing). Single copy 45¢.

Housing completions: November 1973 (C22-73-11). 8pp. Annual subscription $1. Single copy 10¢.

New one-family homes sold and for sale: November 1973 (C25-73-11). 8pp. Annual subscription $3. Single copy (monthly) 10¢. Single copy (annual) $2.

Housing authorized by building permits and public contracts: November 1973 (C40-73-11). 98pp. Annual subscription $22.05 (add $5.55 for foreign mailing). Single copy (monthly) $1.45. Single copy (annual) $4.70.

Authorized construction—Washington, D.C. area: December 1973 (C41-73-12). 4pp. Annual subscription $1. Single copy 10¢.

Estimated sales of U.S. retail stores for weeks ending Feb. 2 (CB-74-36) **and Feb. 9** (CB-74-43). 2pp. 15¢.

Housing starts: December 1973 (C20-73-12). 12pp. Annual subscription $5.15 (add $1.30 for foreign mailing). Single copy 45¢.

Distribution and services

Green coffee—inventories, imports, roastings: fourth quarter 1973 (BG-41-73-4). 4pp. Annual subscription $1.

Monthly selected services receipts: December 1973 (BS-73-12). 12pp. Annual subscription $1. Single copy 10¢.

Foreign Trade

Bunker fuels: November 1973 (PT 810-73-11). 2pp. Annual subscription $1. Single copy 10¢.

Highlights of exports and imports: December 1973 (FT 990-73-12). 12pp. Annual subscription $24.45 (add $6.15 for foreign mailings). Single copy $2.05.

Gold movements: December 1973 (FT 2402-73-12). 2pp. Annual subscription $1. Single copy 10¢.

Governments

Construction expenditure of State and local governments: Oct.-Dec. 1973 (GC73, No. 4). 4pp. 25¢.

Industry

1972 Census of Construction Industries

Preliminary Reports—Industry Series

General contractors — residential buildings, other than single family, SIC 1522 (CC72(P)-2). 4pp. 35¢.

Excavating and foundation work special trade contractors, SIC 1794 (CC72(P)-23). 4pp. 35¢.

1972 Census of Manufactures

Preliminary Reports—Industry Series

Cheese, natural and processed, SIC 2022 (MC72(P)-20B-2). 8pp. 35¢.

Condensed and evaporated milk, SIC 2023 (MC72(P)-20B-3). 8pp. 35¢.

Bread, cake, and related products, SIC 2051 (MC72(P)-20E-1). 10pp. 35¢.

Raw cane sugar, SIC 2061 (MC72(P)-20P-1). 6pp. 35¢.

Cane sugar refining, SIC 2062 (MC72(P)-20F-2). 6pp. 35¢.

Beet sugar, SIC 2063 (MC72(P)-20F-3). 6pp. 35¢.

Chewing gum, SIC 2067 (MC72(P)-20F-5). 6pp. 35¢.

Malt, SIC 2083 (MC72(P)-20R-2). 6pp. 35¢.

Women's hosiery, except socks, SIC 2251 (MC72(P)-22B-1). 8pp. 35¢.

Carpets and rugs, n.e.c., SIC 2279 (MC72(P)-220-3). 6pp. 35¢.

Thread mills, SIC 2284 (MC72(P)-22E-4). 6pp. 35¢.

Felt goods, except woven felts and hats, SIC 2291 (MC72(P)-22F-1). 6pp. 35¢

Cordage and twine, SIC 2298 (MC72(P)-22F-8). 6pp. 35¢.

Men's and boys' underwear, SIC 2322 (MC72(P)-23A-3). 8pp. 35¢.

Men's and boys' work clothing, SIC 2328 (MC72(P)-23A-6). 10pp. 35¢.

Women's and children's underwear, SIC 2341 (MC72(P)-23C-1). 10pp. 35¢.

Hats and caps, except millinery, SIC 2352 (MC72(P)-23C-4). 6pp. 35¢.

Robes and dressing gowns, SIC 2384 (MC72(P)-23D-3). 6pp. 35¢.

Leather and sheep lined clothing, SIC 2386 (MC72(P)-23D-5). 6pp. 35¢.

Apparel belts, SIC 2387 (MC72(P)-23D-6). 6pp. 35¢.

Apparel and accessories, n.e.c., SIC 2389 (MC72(P)-23D-7). 6pp. 35¢.

Curtains and draperies, SIC 2391 (MC72(P)-23E-1). 6pp. 35¢.

Textile bags, SIC 2393 (MC72(P)-23E-3). 8pp. 35¢.

Canvas and related products, SIC 2394 (MC72(P)-23R-4). 3pp. 35¢

Pleating and stitching, SIC 2395 (MC72(P)-23E-5). 8pp. 35¢.

Nailed wood boxes and shook, SIC 2441 (MC72(P)-24C-1). 10pp. 35¢.

Wood pallets and skids, SIC 2448 (MC72(P)-24C-2). 6pp. 35¢.

Hardwood veneer and plywood, SIC 2435 (MC72(P)-24B-3). 8pp. 35¢.

Softwood veneer and plywood, SIC 2436 (MC72(P)-24B). 8pp. 35¢.

Stationery products, SIC 2648 (MC72(P)-26B-7). 8pp. 35¢.

Folding paperboard boxes, SIC 2651 (MC72(P)-26C-1) 8pp. 35¢.

Setup paperboard boxes, SIC 2652 (MC72(P)-26C-2). 8pp. 35¢.

Corrugated and solid fiber boxes, SIC 2653 (MC72(P)-266C-3). 8pp. 35¢.

Book publishing, SIC 2731 (MC72(P)-27A-3). 10pp. 35¢.

Miscellaneous publishing, SIC 2741 (MC72(P)-27A-5). 8pp. 35¢.

Manifold business forms, SIC 2761 (MC72(P)-27B-5). 12pp. 35¢.

Lithographic platemaking services, SIC 2795 (MC73(P)-27C-7). 6pp. 35¢.

Synthetic rubber, SIC 2822 (MC72(P)-28B-2). 6pp. 35¢.

Surface active agents, SIC 2843 (MC72 (P)-28D-3). 6pp. 35¢.

Gum and wood chemicals, SIC 2861 (MC72(P)-28F-1). 6pp. 35¢.

Phosphatic fertilizers, SIC 2874 (MC72 (P)-28G-2). 8pp. 35¢.

Fertilizers, mixing only, SIC 2875 (MC72(P)-28G-3). 10pp. 35¢.

Petroleum refining; lubricating oils and greases; SIC 2911 and SIC 2992 (MC72(P)-29A-1). 12pp. 35¢.

Petroleum and coal products, n.e.c., SIC 2999 (MC72(P)-29A-4). 8pp. 35¢.

Miscellaneous plastics products, SIC 3079 (MC72(P)-30A-6). 10pp. 35¢.

Boot and shoe cut stock and findings, SIC 3131 (MC72(P)-31A-2). 6pp. 35¢

Leather gloves and mittens, SIC 3151 (MC-72(P)-31B-1). 8pp. 35¢.

Flat glass, SIC 3211 (MC72(P)-32A-1). 8pp. 6pp. 35¢.

Fine earthenware food utensils, SIC 3263 (MC72(P)-33A-4). 6pp. 35¢.

Pottery products, n.e.c., SIC 3269 (MC72(P)-32C-5). 6pp. 35¢.

Mineral wood, SIC 3296 (MC72(P)-32E-5). 35¢.

Electrometallurgical products, SIC 3313 (MC73(P)-33A-2). 8pp. 35¢.

Cold finishing of steel shapes, SIC 3316 (MC73(P)-33A-4). 6pp. 35¢.

Steel pipe and tubes, SIC 3317 (MC72(P)-33A-5). 6pp. 35¢.

Malleable iron foundries, SIC 3322 (MC72(P)-33B-2). 8pp. 35¢.

Primary lead, SIC 3332 (MC72(P)-33C-2). 8pp. 35¢.

Primary zinc, SIC 3333 (MC72(P)-33C-3). 8pp. 35¢.

Metal heat treating, SIC 3398 (MC72(P)-33D-7). 6pp. 35¢.

Cutlery, SIC 3421 (MC72(P)-34A-3). 8pp. 35¢

Hand and edge tools, n.e.c., SIC 3423 (MC72(P)-34A-4). 8pp. 35¢.

Handsaws and saw blades, SIC 3425 (MC72(P)-34A-5). 8pp. 35¢.

Iron and steel forgings, SIC 3462 (MC72(P)-34D-3). 8pp. 35¢.

Crowns and closures, SIC 3466 (MC72(P)-34D-6). 8pp. 35¢.

Metal stampings, n.e.c., SIC 3469 (MC72(P)-34D-7.) 8pp. 35¢.

Plating and polishing, SIC 3471 (MC72(P)-34D-8). 8pp. 35¢.

Small arms ammunition, SIC 3482 (MC72(P)-34E-1). 8pp. 35¢.

Small arms, SIC 3484 (MC72(P)-34E-3). 8pp. 35¢.

Ordnance and accessories, n.e.c., SIC 3489 (MC72(P)-34E-4). 6pp. 35¢.

Steel springs, except wire, SIC 3493 (MC72(P)-34F-1). 6pp. 35¢.

General industrial machinery, n.e.c., SIC 3569 (MC72(P)-35E-9). 10pp. 35¢.

Measuring and dispensing pumps, SIC 3586 (MC72(P)-35G-4). 8pp. 35¢.

Transformers, SIC 3612 (MC72(P)-36A-1). 8pp. 35¢.

Industrial controls, SIC 3622 (MC72(P)-366A-4). 12pp. 35¢.

Household refrigerators and freezers, SIC 3632 (MC72(P)-36B-2). 8pp. 35¢.

Household laundry equipment, SIC 3633 (MC72(P)-36B-3). 8pp. 35¢.

Electric housewares and fans, SIC 3634 (MC72(P)-36B-4). 10pp. 35¢.

Household appliances, n.e.c., SIC 3639 (MC72(P)-36B-7). 8pp. 35¢.

Noncurrent-carrying wiring devices, SIC 3644 (MC72(P)-36C-3). 8pp. 35¢.

Commercial lighting fixtures, SIC 3646 (MC72(P)-36C-5). 8pp. 35¢.

X-ray apparatus and tubes, SIC 3693 (MC72-(P)-36E-3). 6pp. 35¢.

Motorcycles, bicycles, and parts, SIC 3751 (MC72(P)-37C-4). 6pp. 35¢.

Surgical and medical instruments, SIC 3841 (MC72(P)-38B-1). 8pp. 35¢.

Surgical appliances and supplies, SIC 3842 (MC72(P)-38B-2). 10pp. 35¢.

Dental equipment and supplies SIC 3843 (MC72(P)-38B-3). 6pp. 35¢.

Jewelers' materials and lapidary work, SIC 3915 (MC72(P)-39A-3). 6pp. 35¢

1972 Census of Mineral Industries

Preliminary Report—Industry Series

Iron ores, SIC 1011 (MIC72(P)-10A). 8pp. 35¢.

Lead and zinc ores, SIC 1031 (MIC72(P)-10B-2). 8pp. 35¢.

Gold ores, SIC 1041 (MIC72(P)-10B-3). 8pp. 35¢.

Silver ores, SIC 1044 (MIC72(P)-10B-4). 8pp. 35¢.

Metal mining services, SIC 1081 (MIC72(P)-10D-1). 8pp. 35¢.

Anthracite, SIC 1111 (MIC72(P)-11A-1). 8pp. 35¢.

Population

Estimates of the population of the United States to December 1, 1973 (Series P-25, No. 512). 2pp. 25¢.

Federal-State Cooperative Program for Population Estimates

Estimates of the population of Vermont counties: July 1, 1972 and 1973 (Series P-26, No. 49). 4pp. 25¢.

Estimates of the population of Arizona counties and metropolitan areas: July 1, 1972 and 1973 (Series P-26, No. 504). 6pp. 25¢.

Estimates of the population of Idaho counties and metropolitan areas: July 1, 1972 and 1973 (Series P-26, No. 51). 6pp. 25¢.

Estimates of the population of New Hampshire counties and metropolitan areas: July 1, 1972 and 1973. (Series P-26, No. 52.) 4pp. 25¢.

Consumer Buying Indicators

Household expenditures on cars and selected new household durables: 1968 to 1972, annual data (Series P-65, No. 47). 28pp. 75¢

SCIENCE AND TECHNOLOGY

NATIONAL BUREAU OF STANDARDS

Precision measurement and calibration—image optics (Spec. Publ. 300, Vol. 10). 934pp., hard cover, $11.10. This volume is one of an extended series which brings together the previously published papers, monographs, abstracts, and bibliographies by NBS authors dealing with precision measurement of specific physical quantities and the calibration of the related metrology equipment.

Semiconductor measurement technology—microelectronic ultrasonic bonding (Spec. Publ. 400-2). 110pp. $1.25. Excerpts of work done under the NBS ultrasonic wire bonding program that was previously published in 17 quarterly and other reports.

Computer networking; approaches to quality service assurance (Tech. Note 800). 26pp. 60¢. In the absence of any direct, well-defined quantitative measure of service quality and reliability, error, collection and analysis is the only basis for service quality control. Therefore, mechanisms are described which facilitate reporting of operational errors, documentation of error corrections, and collection of system performance data, and more.

Network user information support (Tech. Note 802). 27pp. 60¢. With increasing interest in the development of computer networks and the proliferation of remote entry capability from user terminals, user support takes on new dimensions. Some user characteristics are outlined as they affect user support, and more.

Potential systems for lead hazard elimination: evaluations and recommendations for use. (Tech. Note 808), 192 pp. $1.95. Describes testing and evaluation methodologies used to determine (1) the suitability of a series of removal and lead barrier systems (2) the results, and (3) recommendations concerning the use of the systems.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOAA. Vol. 4, No. 1. January 1974. Annual subscription $5.50 (add $.50 for foreign mailing). Single copy $1.50.

National Marine Fisheries Service

Marine fisheries review. Vol. 36, No. 1. January 1974. Annual subscription $12.50 (add $3.25 for foreign mailing). Single copy $1.25.

OFFICE OF TELECOMMUICATIONS

U.S. international telecommunication rate history (OT Report 73-25). December 1973. 204pp. $2.05. Provides a historical compendium of U.S. international telecommunication rates. It is intended to provide a comprehensive source of rates, the rate component for analysis of potential price elasticity of demand, and a basis for not only examining the causes for past rate changes but also estimating potential rate changes. Brief sections explain how international rates are established, and show the rate trends over the past years for various services for some of the major paths.

Annual report: 1973 (OT Bulletin 73-2). 56pp. 60¢. For the period July 1, 1972 through June 30, 1973.

☆ U.S. Government Printing Office: 1974—542-690/17

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, Washington, D.C., 20230

Phone (202) 783-9200

FREDERICK B. DENT, Secretary of Commerce

JOHN K. TABOR, Under Secretary of Commerce

SECRETARIAL OFFICERS

WILLIAM W. BLUNT, Jr.
Asst. Secretary for Economic Development

HENRY B. TURNER,
Asst. Secretary for Administration

SIDNEY L. JONES,
Asst. Secretary for Economic Affairs

BETSY ANCKER-JOHNSON
Asst. Secretary for Science and Technology

ROBERT J. BLACKWELL,
Asst. Secretary for Maritime Affairs (Maritime Administration)

C. LANGHORNE WASHBURN,
Asst. Secretary for Tourism (United States Travel Service)

KARL E. BAKKE,
General Counsel

TILTON H. DOBBIN,
Asst. Secretary for Domestic and International Business (Domestic and International Business Administration)

HEADS OF OPERATING UNITS

ROBERT M. WHITE,
National Oceanic and Atmospheric Administration

ROBERT H. ENSLOW,
Office of Foreign Direct Investments

C. MARSHALL DANN
Patent Office

RICHARD W. ROBERTS
National Bureau of Standards

VINCENT P. BARABBA,
Bureau of the Census

GEORGE JASZI, Bureau of Economic Analysis

EDWARD D. FAILOR,
Social and Economic Statistics Administration

JOHN M. RICHARDSON, Acting,
Office of Telecommunications

WILLIAM T. KNOX, National Technical Information Service

ALEX M. ARMENDARIS,
Office of Minority Business Enterprise

DISTRICT OFFICES

ALBUQUERQUE, N.M., 87101, Room 316, U.S. Courthouse (505) 766-2386.

ANCHORAGE, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-4597.

* **ATLANTA,** 30309, Suite 523, 1401 Peachtree St., NE. (404) 526-6000.

BALTIMORE, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. (205) 325-3327.

BOSTON, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

BUFFALO, N.Y., 14202, Room 910, Federal Bldg., 111 W. Huron St. (716) 842-3208.

CHARLESTON, S.C., 29403, Federal Bldg., Suite 631, 334 Meeting St. (803) 577-4171, Ext. 361.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

CHEYENNE, WYO., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. (307) 778-2151.

* **CHICAGO,** 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

CINCINNATI, 45202, 8028 Federal Office Bldg., 550 Main St. (513) 684-2944.

CLEVELAND, 44114, Room 600, 666 Euclid Ave. (216) 522-4750.

* **DALLAS,** 75202, Room 3E7, 1100 Commerce St. (214) 749-1514.

DENVER, 80202, Room 161, New Custom House, 19th and Stout Sts. (303) 837-3246.

DES MOINES, IOWA, 50309, 609 Federal Bldg., 210 Walnut St. (515) 284-4222.

DETROIT, 48226, 445 Federal Bldg. (313) 226-3650.

GREENSBORO, N.C., 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 275-9111, Ext. 345.

HARTFORD, CONN., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

HONOLULU, 96813, 286 Alexander Young Bldg., 1015 Bishop St. (808) 546-8694.

HOUSTON, 77002, 201 Fannin, 1017 Federal Office Bldg. (713) 226-4231.

JACKSONVILLE, 32207, Suite 129, 4080 Woodcock Drive. (904) 791-2796.

KANSAS CITY, MO., 64106, Room 1840, 601 E. 12th St. (816) 374-3142.

LOS ANGELES, 90024, 11201 Federal Bldg., 11000 Wilshire Blvd. (213) 824-7591.

MEMPHIS, 38103, Room 710, 147 Jefferson Ave. (901) 534-3213.

MIAMI, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

MILWAUKEE, 53203, Straus Bldg., 238 W. Wisconsin Ave. (414) 224-3473.

MINNEAPOLIS, 55401, 306 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

NEW ORLEANS, 70130, 909 Federal Office Bldg., S., 610 South St. (504) 527-6546.

* **NEW YORK,** 10007, 41st Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

NEWARK, N.J., 07102, 24 Commerce St. (201) 645-6214.

* **PHILADELPHIA,** 19106, 10112 Federal Bldg., 600 Arch St. (215) 597-2850.

PHOENIX, ARIZ., 85004, 508 Greater Arizona Savings Bldg., 112 N. Central Ave. (602) 261-3285.

PITTSBURGH, 15222, 431 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

PORTLAND, ORE., 97205, 921 S.W. Washington St., Suite 501, Pittock Block. (503) 221-3001.

RENO, NEV., 89502, 2028 Federal Bldg., 300 Booth St. (702) 784-5203.

RICHMOND, VA., 23240, 8010 Federal Bldg., 400 N. 8th St. (804) 782-2246.

ST. LOUIS, 63103, 2511 Federal Bldg., 1520 Market St. (314) 622-4243.

SALT LAKE CITY, 84111, 1201 Federal Bldg., 125 S. State St. (801) 524-5116.

* **SAN FRANCISCO,** 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave. (415) 556-5860.

SAN JUAN, P.R., 00902, Room 100, Post Office Bldg. (809) 723-4640.

SAVANNAH, 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. (912) 232-4321, Ext. 204.

SEATTLE, 98109, 706 Lake Union Bldg., 1700 Westlake Ave. North (206) 442-5615.

* **Regional Offices**

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE
First-Class Mail

U.S.MAIL

CRTD UNIVM300U R 11
UNIV MICROFILMS
SERIALS SECTION
300 NO ZEEB RD
ANN ARBOR MI 48106

NEW

DATA FROM CENSUS ON U.S. IMPORTS

- f.a.s. (free alongside ship) data—value of goods at foreign port of exportation
- c.i.f. (cost, insurance, freight) data—value of goods at first port of entry in U.S.A.
- The *new* data (in addition to the "customs data" presented previously) are appearing in census foreign trade publications with *import* information starting with January 1974 issues.

Use this coupon to subscribe to this new monthly publication with the new data.

SUBSCRIPTION ORDER FORM

C56::210-146

ENTER MY SUBSCRIPTION TO FT 146-U.S. IMPORTS FOR CONSUMPTION (TSUSA COMMODITY BY COUNTRY OF ORIGIN) at $148.60. Add $37.15 for foreign mailing. No additional postage is required for mailing within the United States, its possessions, Canada, Mexico, and all Central and South American Countries except Argentina, Brazil, British Honduras, French Guiana, Guyana, and Surinam. For shipment to all other foreign countries include additional postage as quoted for each periodical or subscription service.

☐ Remittance Enclosed (Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No.

Send Subscription to:

NAME–FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402